



1151 TAYLOR STREET DETROIT, MICHIGAN 48202 PHONE 313-876-4000

## Director's Message

Dear Friend of the City of Detroit,

I am pleased to introduce the *Community Health Profile* (*Profile*) to residents, community organizations, policymakers and other stakeholders who are vested in the health of Detroiters. The data presented in the narratives and figures of this document are intended to brief readers on the health status of Detroiters. Most of the health issues in this document are discussed in comparison to the State of Michigan and the United States. The *Profile* provides a starting point for community discussions around improving the health of our residents. The *Profile* also provides information regarding critical health indicators for those who are involved in community based planning, which may assist those efforts.

We welcome your suggestions on how we can make future editions the *Profile* more useful. Please take a few moments to complete and return the enclosed user survey. For an electronic version of this document or the user survey, visit the DHD web page at <a href="http://www.ci.detroit.mi.us">http://www.ci.detroit.mi.us</a>. Other resources that the Department provides which complement the *Community Health Profile* include the *Community Health Improvement Plan* and the annual *Data Book*. If you have questions, comments, or need additional information, please send e-mail to <a href="https://www.ci.detroit.mi.us">HPPGM@</code> health.detroit.mi.us</a> or contact Kenyetta Jackson in the DHD Office of Health Policy, Planning, and Grants Management at (313) 876-0861.

Sincerely,

Judith Harper West, M.P.H Deputy Public Health Director

# Acknowledgement

The Detroit Health Department extends grateful recognition to those whose guidance made the *Community Health Profile* a reality,

Judith Harper West, Deputy Public Health Director

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#### How to Use The Profile

The *Profile* is a resource for Detroit health data. The health topics discussed here include those addressed by DHD and issues identified as critical to the health of residents. For most of the health issues in the *Profile*, Detroit data are compared to those of Michigan and the United States. This information is not exhaustive and should be considered within the context of other resources, as well as the unique characteristics of smaller segments of the city. Please see the Glossary for definitions of selected public health terms.

Users of the *Profile* should be mindful of these distinctions:

- 1. Unless otherwise indicated, Michigan and United States numbers include Detroit residents.
- 2. Users should be attentive to the ranges, and distinctions between numbers, percentages, and rates when interpreting charts.
- 3. Although rates allow the comparison of health indicators across communities, all rates are subject to variation based upon factors such as the number of events and the population about whom the rate has been calculated. The meaning of rates based upon small numbers should be interpreted with caution. Other data may be needed to support the interpretation drawn from such rates.
- 4. Data for diseases are based upon reported cases. Due to under-reporting or reporting delays, reported numbers and calculated rates may not reflect the best sense of how the community is affected by a given disease. These numbers may change over time as the reported cases are updated. Rates and numbers across data sources may also differ depending upon the criteria used for case inclusion.
- 5. In order to compare health indicators from Detroit to the state and national levels, racial categories in this document are consistent with those used by the United States Census Bureau. Some groups in the Detroit population, such as Hispanic Americans and Arab Americans, have traditionally been categorized as "White" for purposes of data collection.
  - Those of "Hispanic" ethnicity are now represented in a category. Individuals who identify with Hispanic ethnicity may be of any race (i.e. Black, White). The term "Black, Non-Hispanic," refers to residents of African descent who reside in the United States, excluding those who are of Hispanic ethnicity. "White, Non-Hispanic," denotes residents of European and other descents including Arab Americans, excluding Hispanic persons. Hereafter, Non-Hispanics of African descent will be noted as "Black"; "White, Non-Hispanics" will be noted as "White."
- 6. Where Detroit data are presented in comparison to those Michigan and the United States, local data may have been drawn from sources other than DHD to retain consistency in the calculation of the statistics.
- 7. *Healthy People 2010 (HP2010)* is a set of health objectives for the United States to achieve over the first decade of the new century. Different communities, organizations, professionals and

others use these objectives to help develop programs to improve health. As *HP2010* provides common ends for all levels of public health to pursue, it will often be referenced in this profile in order to illustrate the city's status in the context of accomplishing the national objectives. For more information regarding *HP2010* see the Healthy People website at http://www.health.gov.

# Detroit Health Department Community Health Profile, 2000

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INTRODUCTION: THE CITY OF DETROIT

## Introduction: The City of Detroit

The city is located on the Detroit River, north of Windsor, Ontario, Canada in Southeast Michigan. Covering 138.7 square miles, Detroit has always been the largest city in Michigan and is now the tenth largest city in the United States.<sup>1</sup>

Like other urban cities, Detroit was a destination for many Black Americans who migrated from the south for jobs between 1940 and 1960. During those years, Detroit's Black population increased from 150,000 to nearly 500,000. <sup>2</sup>

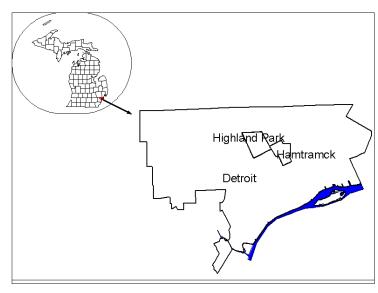


Figure 1

In 2001, Detroit celebrated its 300th birthday. It is now a major

metropolitan city with a population of 951,270 and is the largest Black majority city in the country, according to the United States Census for the year 2000. Eighty-one percent of the Detroit population is Black. Throughout the second half of the twentieth century Detroit has survived several sociopolitical periods of difficulty that impacted all arenas of life, including health, for residents. In recent years, as evidenced by real estate activity, rising property value, casino building and broad scale development the city is enjoying a social and political resurgence. The major goods of the city include automobiles and automobile parts, processed foods, rolled steel, alarms, chemicals, metal stamping, automation systems, welding systems and assembly systems.

According to the 2000 Census, other racial and ethnic groups that comprise the Detroit population include: Whites (10.5%), Hispanics (5%), and Asians (1%). Native Americans and Alaskans and Native Hawaiians and Pacific Islanders each represent less than one percent of the population. Persons who specified a race other than the aforementioned or reported two or more races in the Census comprise 2% of the Detroit population. Forty seven percent of the city residents are male and fifty three percent are female. Thirty one percent of all Detroit residents are under age 18. Roughly 10% of the residents are aged 65 and over (See Appendix I for detailed population information).

Detroit's ten leading causes of death for the year 2000 were: 1) heart disease, 2) cancer, 3) cerebrovascular disease, 4) accidents, 5) homicide, 6) chronic lower respiratory disease (CLRD), 7) diabetes, 8) septicemia, 9) digestive disease, and 10) mental/behavioral disease. The estimated median household income in the city was \$30,383 as reported by the 2000 Census Supplementary Survey. Of Detroit residents who are eligible for work, 14.8% are estimated to be unemployed. Roughly one-fifth of persons in the city are estimated to be living below poverty level (20.4%). Of the residents who were 25 years of age and older during the, 33% are estimated to be high school graduates, while 27% are estimated not to have a high school

diploma. Twenty three percent of the residents aged 25 and older are estimated to have had "some" college education, while 17% may have earned an Associate Degree or higher. Ninety percent of the population is estimated to speak English only. Verification of these estimates is anticipated in Mid-2002, after the publication of the *Profile*.\*

<sup>\*</sup> The Census 2000 Supplementary Survey universe is limited to the household population and excludes the population living in institutions, college dormitories, and other group quarters. Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate is represented through the use of a confidence interval. The confidence interval computed for the Survey data is a 90 percent confidence interval and can be interpreted roughly as providing 90 percent certainty that the true number falls a lower and a higher possible number. The upper and lower numbers are not provided in this document, only the estimates.

MATERNAL AND CHILD HEALTH

Infant mortality is the death of a child prior to the first birthday.

#### What is infant mortality?

Indicators of community health are often expressed in terms of morbidity (various illnesses) or mortality (deaths caused by various conditions). Infant mortality is the death of a child before the first birthday. There are various causes for infant mortality.

Why is infant mortality an important health issue for Detroiters?

One baby dying is "one too many." Infant mortality is a tragedy for the family and for the community around them. A high number of infant deaths reflects the health of women and children, and the overall health status of the population to which they belong. The factors that contribute to high numbers of infant deaths cannot be fully explained by rates and numbers. Biological, psychosocial, environmental and even historical elements call for a multi-level analysis in considering infant death prevention strategies. The attention of Detroit residents and community organizations may generate efforts to change behaviors that are associated with risk for infant death.

#### Infant Mortality in Detroit

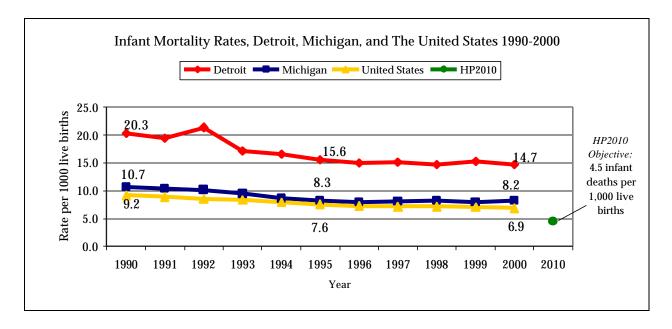


Figure 2

The number of infant deaths varies across populations due to different characteristics among the people who comprise them. A standard rate is used to compare the impact of infant mortality across communities of different sizes. The infant mortality rate is calculated per 1000 live births in the population.

The infant mortality rate for Detroiters has been consistently higher than those of the state and the country. As shown in Figure 2, from 1995 to 2000, deaths for babies in Detroit have more than doubled the rate for the United States and nearly double the rate for Michigan. The infant mortality rate for the United States in 2000 was 6.9. In the State of Michigan, 1,112 infants under

the age of one year died, resulting in an infant mortality rate of 8.2 per 1,000 live births in 2000. In 2000, 233 infants died in Detroit, creating an infant mortality rate of 14.7 per 1000 live births.

As described by the Michigan Department of Community Health (MDCH), disparity between the Black infant mortality rate and the rate for White infants continues. The 2000 infant mortality rate for Black residents of Michigan is comparable to that of White Michiganders prior to 1971. A Black infant in the State is 3 times more likely to die than a White infant. For the year 2000 the Black infant death rate was 18.2 while the White infant death rate was 6.0. In Detroit, the 1998-2000 moving average for Black infant deaths is 16.7. The White moving average for the same years is 6.3. A Black infant in Detroit is 2.6 times more likely to die than a White infant in the city.

Further, after seeing significant declines in mortality for both White and Black infants during the early 1990s, in recent years the White rate has continued to decline, while the Black infant death rate increased from 16.8 in 1998 to 18.2 in 2000 (White residents of the state had a 2000 infant mortality rate of 6.0.) Disparate rates of infant mortality for White residents and Black residents are mirrored in Detroit with White residents suffering a rate of 7.4 and Black residents 16.2.

As reflected by 2000 data, the leading cause of death for Detroit infants was premature delivery. An infant born prematurely often weighs less than 2500 grams (5.5 pounds) and is considered to be low birthweight. Low birthweight babies tend to be delivered pre-term (delivery prior to 37 weeks gestation) or to have grown too slowly in utero. Nearly 80% of the Detroit infants who died in 2000 were low birthweight. As shown in Figure 3, 13.9 % of 15, 891 Detroit babies were low birthweight, placing them at higher risk for death.

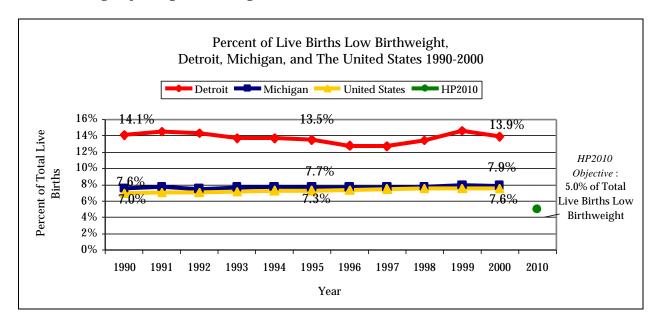


Figure 3

Some of the precursors of low birthweight include preterm delivery, maternal hypertension, maternal anemia, low maternal weight gain, maternal lead exposure, no prenatal care,

substance abuse, and sexually transmitted disease. Low birthweight has been identified as the "...single most important predictor of infant mortality." For that reason, many interventions for infant mortality prevention target low birthweight as the outcome to improve.

The second leading cause of Detroit infant deaths in 2000 was Sudden Infant Death Syndrome (SIDS). Sometimes known as "crib death," SIDS is the sudden death of an infant, which remains unexplained after a thorough case investigation. This investigation should include rigorous examination of the death scene immediately after the incident and with as little change in the scene as possible. A thorough investigation for the cause of infant death when SIDS is suspected includes an autopsy, and a review of the clinical and social history of the child.

SIDS risk factors with the greatest potential for change in the care of the infant include a prone sleeping position, sleeping on soft bedding, maternal smoking, and overheating. A growing concern in the Detroit area is that other causes of death may be identified as SIDS. For example, in instances of bed sharing, another individual overlaying may cause the child to suffocate. In this instance, the death of an infant could be explained, if witnessed, and is preventable. <sup>4</sup>

#### Fetal Deaths

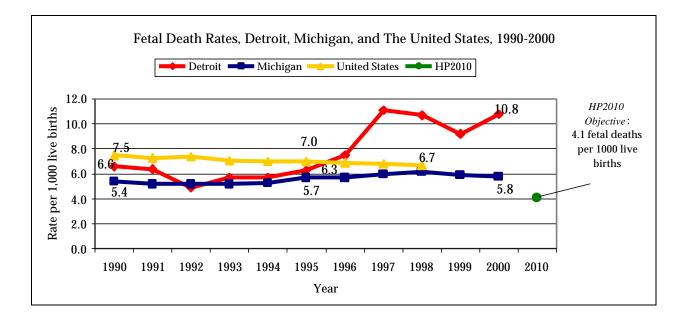


Figure 4

Fetal death, also known as "stillbirth" and associated with "miscarriage", is the death of the fetus before it reaches maturity or is delivered. For data use purposes, fetal deaths are classified according to *gestational age*, or the duration of the pregnancy. For the *Profile*, fetal deaths with gestation of 20 weeks or more are represented in the data. As shown in Figure 4, the Healthy People 2010 objective for fetal deaths is 4.1 deaths (20 weeks of gestation or more). Michigan rates of fetal death have been below the national rate, for which the most recent statistic to date is 6.7 deaths (1998).

Though the rate of infant mortality is decreasing, constant effort is needed to decrease fetal *and* infant mortality. Fetal death rates for Detroit have increased from 9.2 in 1999 to 10.8 in 2000. In past years, most communities have focused upon the numbers and rates of infant mortality without fetal deaths. Recently, using the Perinatal Periods of Risk model, public health practitioners have begun to look at fetal and infant deaths together. Considering data from fetal and infant mortality may be more indicative of ways to design effective community interventions and improve maternal and child health overall.

Childhood Immunization is the administration of a vaccine that enhances the resistance of a child's body to communicable diseases.				

What is childhood immunization?

Childhood immunization is the administration of a vaccine that enhances the resistance of a child's body to communicable diseases. Vaccines are biological substances that produce protective antibodies to safeguard the child's body from the real disease germ.

Why is childhood immunization an important health issue for Detroiters?

Vaccines are responsible for the control of many infectious diseases that were once common in this country. Vaccines have reduced, and in some cases, eliminated, many diseases that routinely killed or harmed infants, children, and adults. However, the viruses and bacteria that cause vaccine-preventable disease and death still exist and can be passed on to people who are not protected by vaccines. Vaccine-preventable diseases have a costly impact, resulting in doctor visits, hospitalizations, and premature deaths. Sick children can also cause parents to lose time from work. <sup>5</sup>

Children under 5 are especially susceptible to disease because their immune systems have not built up the necessary defenses to fight infection. By immunizing in accordance with Centers for Disease Control and Prevention (CDC) guidelines, a child can be protected by age 2 from disease and help protect others at school or daycare. Children need immunizations (shots) to protect them from childhood diseases. These diseases can have serious complications and even result in death. Vaccines prevent the following diseases:

- Measles
- Mumps
- Polio
- Rubella (German Measles)
- Pertussis (Whooping Cough)
- Diphtheria
- Tetanus (Lockjaw)
- Haemophilus influenzae type b (Hib disease a major cause of bacterial meningitis)
- Hepatitis B
- Varicella (chickenpox)
- Pneumococcal disease (causes bacterial meningitis and blood infections)

The following vaccinations are recommended by the CDC and MDCH by age two and can be given over five visits by a health provider:

- 4 doses of diphtheria, tetanus & pertussis vaccine (DTaP)
- 4 doses of Hib vaccine

- 3 doses of polio vaccine
- 3 doses of hepatitis B vaccine
- 4 doses of pneumococcal vaccine
- 1 dose of measles, mumps & rubella vaccine (MMR)
- 1 dose of varicella vaccine

The Michigan Vaccines for Children program, as part of a federal vaccination program, provides free vaccines for underinsured children.

#### Immunization Rates in Detroit

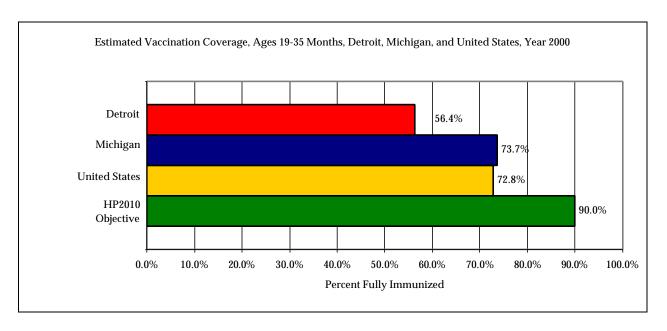


Figure 5

An examination of ages 19-35 months, however, gives a more complete impression of children who are able to access immunization and be protected in a reasonable amount of time while still young. Figure 5 depicts estimated coverage according to the response of those who participated in the 2000 National Immunization Survey (NIS).

<sup>&</sup>lt;sup>†</sup> The NIS data provide current, population-based, state and local area estimates of vaccination coverage. It is a means of measuring progress toward goals to increase immunization coverage for American children. As well as evaluating progress towards national vaccination goals, the CDC uses the NIS data to identify states with the highest and lowest rates. Detroit is one of 27 urban areas that are monitored through the NIS.

A few cautions to note when using this data. The NIS is conducted by random telephone interview, and the information received during the telephone interview is confirmed with the child's provider. Statistical methods are used to adjust for children whose parents refuse to participate, those with intermittent access to telephone service, or those whose immunization histories cannot be verified through their providers.

As shown, while Michigan and the United States are pretty close in the percentage of 19-35 months of age who have been immunized (73.7% and 72.8% respectively), Detroit children have had less coverage (56.4%).<sup>6</sup> HP2010 seeks to increase to and maintain 90% vaccination coverage levels for universally recommended vaccines among children aged 19-35 months.



What is adolescent childbearing?

Also known as "teen pregnancy," adolescent childbearing refers to females who become pregnant and deliver a child during their "teenage" years. Often confused is the difference between adolescent *pregnancy* and *births* to adolescent mothers.

"Teen pregnancy," although widely used, refers to any instance of conception for a female who is 13-19 years of age. Such an instance could have various outcomes that are difficult to track, such as spontaneous abortion (miscarriage) or induced abortion. Health data reported on a birth certificate is accessible regarding live births.

Why is adolescent childbearing an important health issue for Detroiters?

The teens who become mothers are a select group who tend to be medically underserved, have health problems and risks, suffer extreme socioeconomic disadvantage, and often educational disadvantage prior to their pregnancies. These characteristics increase their chances of experiencing poor birth outcomes such as preterm delivery, low birth weight, or infant mortality. They also predispose teen mothers and their children to long-term socioeconomic disadvantage, itself associated with a wide range of health risks.

Except for the very youngest teens, research suggests that the young age of the mother may not contribute directly to these poor outcomes, but the existence of very high rates of teenage childbearing in Detroit is indicative of a large target population of women, children and families at risk for poor health outcomes.

Overall, comprehensive multi-disciplinary interventions to improve academic opportunities and performance, address extreme economic deprivation, and serve adolescent and young adult health needs (particularly those of Black females) might discourage teenaged childbearing. As well, they may improve the quality of life for teens and young adults in the broader community. For sure, though, if teen pregnancy is to be looked upon as a health problem, these broader areas and any other related factors should be considered in efforts to intervene. In addition, programs that increase the ability of pregnant teens to utilize prenatal health

services will aid a large proportion of Detroit's children to begin life with good health. <sup>7,8,9</sup>

Births to Adolescent Mothers in Detroit

As with the city, birth rates to young women in the 15-19 age category have been declining

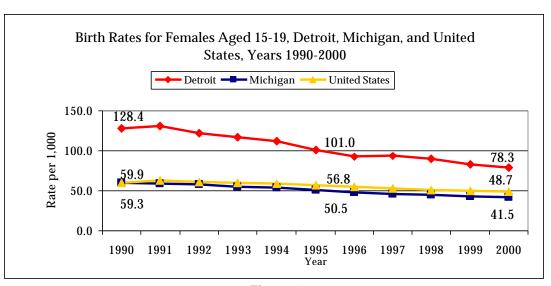


Figure 6

statewide and nationally (see Figure 6). In 1990, the rate of births to Detroit females aged 15-19 more than doubled the state and national rates; and in 2000 it nearly doubled those rates. Still, the decline has been dramatic in births to Detroit females in this age group. In 2000, there were 50 fewer births per 1000 female residents aged 15-19 years than in 1990.

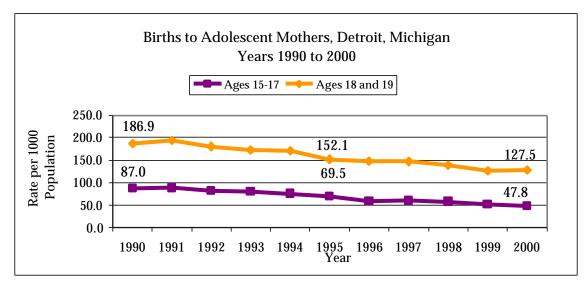


Figure 7

Figure 7 depicts the decline of birth rates to Detroit females in the 15-19 age category over the past decade. The age category is further separated here to display rate differences between 15-17 year olds and females who gave birth when they were 18 or 19 years old. The birth rate to Detroit mothers aged 18 and 19 years old more than double those for 15-17 year olds. Birth rates for women ages 18 and 19 have consistently been double or more than those for ages 15-17.

Healthy People 2010 has objectives to reduce the national pregnancy rate to 43 per 1000 females aged 15-17 in 2010. The most recent pregnancy rate available for the United States was the 1997 rate of 63.7 estimated pregnancies for females in this age group. <sup>10</sup> In 2000, Michigan females aged 15-17 had an estimated 35.5 pregnancies per 1000. The Detroit estimate for 2000 is 75.4 pregnancies per 1000 female residents aged 15-17.§

#### YOUTH RISK BEHAVIOR SURVEY

Detroit YRBS participants who reported ever having sexual intercourse declined from 1995 (72% of respondents) to 1999 (60.3% of respondents). Those percentages were higher than those reported by all Michigan participants who reported ever having sex (41% for 1995 and 44.6% in

<sup>§</sup> According to the Michigan Department of Community Health, Division for Vital Records and Health Statistics, Estimated Pregnancies are the sum of Live Births + Abortions + Estimated Miscarriages. The Division used a model developed by the Population Council (20% of the Live Births and 10% of Abortions) to calculate Estimated Miscarriages. Abortion data is drawn from provider reports to the Division.

1999). Of those who had sexual intercourse in the 3 months prior to the survey, 66% of the Detroit students reported using a condom in 1999 while 58.6% of the Michigan students did.<sup>11,\*\*</sup>

#### MICHIGAN PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (PRAMS)

A component that is unique to the Michigan survey and pertinent to the Detroit population is that mothers were sampled from hospitals, interviewed just after delivery, and mailed follow up surveys. This was done to increase the likelihood that survey results would reflect the experiences of Black women. Of five hospitals from which Black mothers were sampled, four were in Detroit (Hutzel, Sinai, Grace, and Riverview Hospitals). ††

Mothers under the age of 20 represented 11% of the total number of survey respondents. In some of the survey results, they were compared to women aged 20-29 and women over age 30. Of the post-partum mothers under age 20 who participated, 86.1% reported that their pregnancies were unintended, while 41% of the 20-29 group and 24.8% of the 30+ group reported. Of the women who did not intend to become pregnant, 43.1% of the mothers under 20 were using birth control. A larger percentage (9.2%) of the mothers under 20 delivered low birthweight infants than women 20-29 (7.4%) and women over 30 (6.3%).<sup>12</sup>

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<sup>\*\*</sup> The Youth Risk Behavior Surveillance System (YRBS) was developed by the Centers for Disease Control and Prevention, in collaboration with other agencies including state and local departments of education and health. The YRBSS includes national, state, territorial, and local school-based surveys of high school students. National surveys were conducted in 1990, 1991, 1993, 1995, 1997, and 1999. Data are available about Detroit and Michigan high school students who participated (beginning in 1995), and can be compared to data for the rest of Michigan and The United States

the PRAMS is an annual survey of post-partum mothers conducted nationally by the Centers of Disease Control and Prevention and in the state by the Michigan Department of Community Health. The data from the survey is used to monitor progress toward national and state pregnancy related health objectives, including the increase of positive birth outcomes. As well, PRAMS is used to identify and monitor selected self-reported maternal behaviors and experiences that occur before, during, and after pregnancy among women who deliver live-born infants. Some of the survey results are related to the health behaviors of adolescent females prior to pregnancy and subsequent delivery of a live birth.

ENVIRONMENTAL HEALTH

 $\begin{tabular}{ll} Childhood\ asthma \\ is a chronic inflammatory\ disorder\ of\ the\ breathing\ passages\ in\ children \\ from\ birth\ through\ age\ 14. \end{tabular}$ 

#### What is childhood asthma?

Childhood asthma is a chronic disorder of the breathing passages in children from birth through age 14. Persons with asthma experience constriction (tightening of the muscles surrounding the airways) and inflammation (swelling and irritation of the airways). Together, constriction and inflammation cause narrowing of the airways, which results in recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. Environmental and other factors such as dust, pollen, pet dander, or strong smells are common triggers for asthma "attacks."

Why is childhood asthma a health concern for Detroiters?

Nationally, the number of people living with asthma has been increasing since the early 1980's for all racial and age groups. According to the National Heart, Lung, and Blood Institute (NHLBI), this chronic disease does have a worse impact on children and Black people than the rest of the population. <sup>13</sup> Both of these groups are highly represented in the city.

Asthma cannot be cured, and in its worst stages, can be life threatening. Though not curable, there have been innovations to manage the inflammatory condition associated with the disease. Knowledge regarding asthma, and proper treatment/management could help to improve daily functioning for Detroiters with asthma, avert acute attacks, and decrease the chances of damage to the airways and lungs over time.<sup>14</sup>

#### Childhood Asthma in Detroit

Children under 5 account for the highest U.S. rate of emergency department visits due to asthma. Between 1992 and 1998, rates of national emergency department visits for asthma increased, with the greatest increase occurring in children ages 10-17. Hospitalization rates also rose during this time period. Between 1979-81 and 1997-99, hospitalization rates for children under 5 increased 48 percent. In 1997-99, hospitalization rates were more than three times higher for Black children than for White children. Between 1990 and 1997, the Michigan hospitalization rate for asthma was 17.0 per 10,000 residents. The rate of hospitalization for Black residents of Michigan (46.5 per 10,000 residents), however, was four times higher than White residents (11.6/10,000 residents). From 1997-1999, an average of 43.5% of Detroit's hospital discharges for asthma were for persons under the age of 18.

An MDCH analysis of childhood asthma hospitalizations from 1989 to 1993 presented findings related to asthma in Detroit as compared with the rest of Wayne County. During that period, the rate of hospital discharge for childhood asthma was 2.3 times higher for Detroit than the rest of the county. Of 12, 500 1989-1993 asthma discharges for children under 15 in Wayne County, 72% were Detroit residents. During the analysis period, discharge rates rose for Detroiters while remaining stable for the rest of the county. Rates for White children remained about the same while rates for Black children increased. According to the study, the highest rates of asthma discharge were in the central zip codes of the Detroit (see Appendix II for more detail). For children under five, *HP2010* recommends the reduction of asthma related hospitalizations from 46.5 per 10,000 in 1997 to 25 per 10,000 children under five in 2010. For ages 5-64, the aim is to reduce the 1997 hospitalization rate of 12.5 per 10,000 population to 7.7 in 2010.

the blood, known as "lead	Childhood Lead Poisoning nat can be swallowed or inhaled. I poisoning," may damage the blo n permanent harmful effects to th	ood, bones, and organs

#### What is childhood lead poisoning?

Lead is a toxic metal that can be swallowed or inhaled resulting in permanent harmful effects, particularly to the health of children. Commonly known as "lead poisoning," an elevated blood lead level (EBL) is considered to be greater than or equal to 10 micrograms per deciliter (ug/dL). An EBL of 20 ug/dL or higher requires the care of a physician and possibly some medical intervention. As well, at 20 ug/dL, environmental investigation is conducted to determine the source of lead poisoning.  $^{15}$ 

Why is childhood lead poisoning a health concern for Detroiters?

Known effects of lead in the human system include: anemia, developmental delays, learning and behavioral problems, major organ failure, reproductive problems, and osteoporosis. The effects of a high blood lead level can cause seizures, the onset of coma or even death. A child's developing system from birth through age six is most vulnerable to the effects of lead, as it absorbs more lead when exposed and the health consequences are likely to be more detrimental and long lasting. Pregnant women should also be tested in order to prevent or reduce fetal lead exposure.

The environment in which an individual spends the most time is likely to be the source of exposure. Anyone who lives in old housing is susceptible to lead exposure from the paint, building materials, plumbing, or soil of their environment. According to the Michigan Childhood Lead Poisoning Prevention Project (MCLPPP), 63% of all of the housing units in Detroit were built before 1950. Paint used in housing had the highest lead content before 1950, when the amount of lead used was reduced. In 1970, federal legislation prohibited any use of lead paint in federally financed and public housing. Still, the production and sale of lead-based paint was not banned nationwide for consumer use until 1978. Therefore, even if a home was built *after* 1950, there is probably some lead-based paint in it. Landlords and apartment management are required to abate sources of potential lead exposure and to disclose hazard information to tenants.

# Lead Poisoned Children in Detroit

The *HP2010* objective for lead poisoning is zero percent. Through the decade of the 1990s the United States achieved significant reduction in the number of lead poisoned children and the severity of their blood lead levels. Yet, according to the American Academy of Pediatrics, poor Black children and urban children are most exposed to lead.<sup>19</sup>

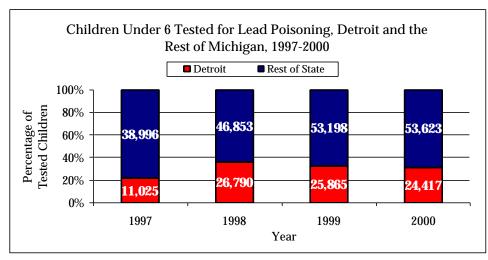


Figure 8

Having a large proportion of pre-1950 housing, over 40% of the residents under age 6 living in poverty, and a majority population of color means that Detroit is at high-risk for childhood lead poisoning. Therefore, a universal testing policy that all Detroit children under age six be tested for lead poisoning is recommended by agencies such as the Centers for Disease

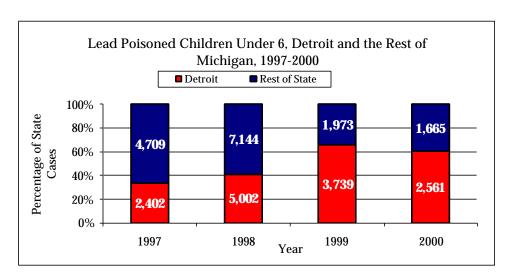


Figure 9

Control and Prevention and the Environmental Protection Agency. In addition, the American Academy of Pediatrics recommends that a blood lead screening be a part of routine health supervision at 9-12 months of age, and again at 24 months.<sup>20</sup> Of 77,804 Detroit children aged 1 through 5, sixty nine percent (69.3%) have had at least one test for blood lead in their lifetime.<sup>‡‡</sup>.

In the year 2000, 24,417 of 93,365 (26.1%) Detroit children under age 6 were tested (see Figure 8). Detroit children accounted for 31.4 % of all Michigan children tested in 2000, but were 60.6% of those whose tests were confirmed positive for lead poisoning (see Figure 9). Though most of the children under 6 years of age in the city were not tested in 2000, *two-thirds* of the Michigan cases of childhood lead poisoning are residents of Detroit.

<sup>‡‡</sup> This is data for children tested as of December, 2001. Children aged 1-5 are those born between January 1, 1996 to December 31, 2000.

COMMUNICABLE DISEASE

 $\begin{tabular}{ll} \it Tuberculosis \\ \it is a communicable disease that is spread through airborne respiratory \\ \it secretions. \\ \end{tabular}$ 

#### What is tuberculosis?

Tuberculosis (TB) is a communicable disease that is spread in confined spaces through airborne respiratory secretions. The TB bacteria are called *Mycobacterium tuberculosis*. The TB bacteria are spread into the air in tiny droplets from the nose, mouth or lung fluid of a person with active disease when they cough, sneeze, or spit. When a person breathes in TB bacteria, they can settle in the lungs and begin to grow.

TB bacteria become active if the immune system cannot stop them from growing. The active bacteria begin to multiply in the body and may cause TB disease. Some people develop TB disease soon after becoming infected, before their immune system can fight the TB bacteria. Other people may get sick later, when their immune system becomes weak for some reason. §§§

Except under unusual circumstances, TB is not highly contagious and generally requires prolonged or intense exposure to cause disease. TB is not usually spread by brief contact in large, spacious areas, or by handling the bed sheets, books, furniture, or eating utensils of a person who has the disease. When a person is infected, TB generally affects the lungs causing cough, chest pain, infected sputum that may be blood tinged, fever, weight loss, and abnormal chest x-ray. More rarely, the TB germ can cause disease in other body organs. <sup>21, 22</sup>

Some people are more likely to be exposed to TB, including:

- # those who have spent time with a person who is known or suspected to have TB disease,
- ★ individuals who have HIV infection or another condition that increases the risk for TB disease,
- # individuals from countries where TB is more common (most countries in Latin America and the Caribbean, Africa, Asia, Eastern Europe, and Russia),
- # individuals who are injecting drug users, and
- # persons in long-term residential settings such as homeless shelters, nursing homes, drug-treatment centers, health care clinics, jails, and prisons.

Why is TB an important health issue for Detroiters?

TB can be prevented and cured. It is often thought to be a "disease of the past" that no longer threatens community health today. However, TB is still a problem; more than 16,000 cases were reported in 2000 in the United States.<sup>23</sup> Since TB can be contagious, even a small TB caseload in a population is a health concern.

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<sup>§§</sup> According to the CDC, people with weak immune systems include babies and young children, people living with HIV, and those with other conditions, such as: substance abuse, diabetes, silicosis, cancer of the head or neck, leukemia or Hodgkin's disease, severe kidney disease, low body weight, and certain medical treatments (such as corticosteroid treatment or organ transplants).

Latent TB infection is a condition in which TB bacteria are alive but inactive in the body. Some people who have latent TB infection are more likely to develop TB disease than others and are at high risk. They include:

- **♯** people with HIV infection,
- ₩ people who became infected with TB bacteria in the last 2 years,
- ₩ babies and young children,
- 署 people who inject drugs,
- # people who are sick with other diseases that weaken the immune system,
- # elderly people,
- # and people who were not treated correctly for TB in the past.

People with latent TB infection have no symptoms, do not feel sick, cannot spread TB to others, and usually have a positive skin test reaction. Still, they may develop TB disease if they do not receive treatment for latent TB infection. Once identified, persons with latent TB infection can take special medication to prevent them from developing active TB disease.

#### TB in Detroit

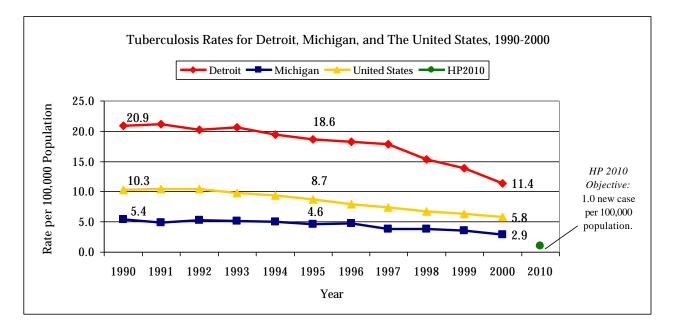


Figure 10

The three-year average TB rate for 1997-1999 was 3.8 in Michigan and 15.3 in Detroit (per 100,000 residents). Throughout the nineties, Detroit accounted for a large proportion of Michigan's TB cases. Local cases peaked in 1991, when 47.9% of 451 reported TB cases in Michigan were Detroit residents. This percentage fluctuated throughout the decade, again rising to 46.8% of 374 Michigan cases in 1998. In 1998 and 1999, Detroit residents accounted for 38% of those cases.

As shown in Figure 10, the 2000 rate of TB for Detroit was 11.4 per 100,000 residents, while the state and national rates were 5.8 and 2.9 cases per 100,000 respectively. There were 287 Michigan cases of TB reported in 2000 including 108 Detroit cases.\*\*\*, †††. 25 HP2010 seeks the reduction of new TB cases to 1.0 per 100,000 in population by the year 2010.

<sup>\*\*\*</sup> TB data represent reported cases only and must be interpreted in light of reporting practices. According to the Michigan Department of Community Health, the degree and completeness of reporting by physicians, hospitals and clinical laboratories to health departments varies significantly. It is likely that the number of cases reported underrepresents the true incidence of disease.

<sup>†††</sup> There are about 409 persons living in Michigan who are known to be co-infected with HIV and TB. Seventy percent of them (285) are Detroit residents. For more information, please see the HIV section of the *Profile*.

Human Immunodeficiency Virus (HIV) is a retrovirus that destroys the essential cells of the immune system. Acquired Immunodeficiency Syndrome (AIDS) is the most serious stage of HIV infection.

#### What is HIV?

Human Immunodeficiency Virus, also known as "HIV" is a retrovirus that destroys the essential cells of the immune system. HIV can be transmitted through the exchange of blood or other bodily fluids, either through unprotected sex, needle sharing or perinatally from mother to baby.

A person is considered to be "HIV positive" if he or she has two or more reactive HIV antibody tests, and then another antibody test that is more specific. The time between a person's infection and the development of antibodies is called the seroconversion period. People with HIV can infect others during this period. HIV can be present in the body for up to 12 or more years without producing any outward signs of illness.

Generally, risk for HIV infection is categorized by behavioral group. Men who have sex with other men (MSM) represent the greatest number of HIV/AIDS cases with a known mode of transmission<sup>‡‡‡</sup> nationally and on state and local levels. Injecting drug users (IDU) represent the next largest group of persons living with HIV or AIDS in Michigan. Still, other behavioral groups are at high and increasing risk for HIV infection. Heterosexuals constitute the next largest group.<sup>26</sup>

Sharing needles or syringes with an infected person is a common mode of transmission. As well, the virus can be acquired through transfusions of infected blood or blood clotting factors. This is a rare since 1985, as the blood supply for such procedures is tested for HIV antibodies in the United States. Babies born to mothers infected with HIV may become infected in utero, during delivery, or through breastfeeding after birth. The reduction of perinatal transmission of represents the best measurable success in reducing HIV transmission. This is due to the use of AZT, which is given to HIV positive pregnant women.

Acquired Immune Deficiency Syndrome, known as "AIDS", is the most serious stage of HIV infection. As the immune system becomes weaker, the infected person becomes vulnerable to diseases that do not affect the typical "healthy" person. Called *opportunistic* infections, they take advantage of the weakened state of the immune system.

The Center for Disease Control and Prevention (CDC) defines the progression from HIV to AIDS as occurring when a person is either: a) infected with HIV and has a CD4 cell count of less than 200, or b) infected with HIV and has contracted one of the opportunistic infections or neoplasms. There 26 known opportunistic infections. The most common ones are: *Pneumocystis carinii* pneumonia (PCP), yeast infections of the esophagus, Kaposi's sarcoma (a cancer of certain blood vessels), and cytomegalovirus (CMV) retinitis (an infection of the eye that can lead to blindness).

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<sup>‡‡‡</sup> By the end of 2000, 1,595 individuals living with HIV or AIDS in Michigan had unknown modes of transmission. Sixteen percent of the 9,749 people living with HIV or AIDS in Michigan were categorized as unknown. In past years, when undetermined cases were further investigated they were reclassified into one of the known categories of risk (i.e. MSM, IDU, heterosexual).

Why is HIV an important health issue for Detroiters?

HIV is preventable. The first U.S. cases of AIDS were identified in the early 1980s. New cases increased rapidly throughout the eighties and peaked in the early 1990s. The CDC related the peak in new diagnoses to an expansion of the definition for AIDS. Increases in AIDS diagnoses and deaths continued until 1996, when combination antiretroviral therapy was introduced. This combination therapy, an advance in HIV treatment, delays the progression to AIDS and death. The new therapy resulted in large declines in AIDS incidence and deaths beginning in 1996 and over the next several years. Unfortunately, the number of individuals newly diagnosed with HIV continued to increase. As a result of decreases in deaths *and* increasing new infections, there are now more persons living with HIV or AIDS than have ever before.

The critical nature of HIV and AIDS as health issues has not changed. There is no known cure for HIV. For groups such as racial/ethnic minorities and women, the numbers of new HIV diagnoses are increasing. Nationally, there are still 40,000 new cases of HIV each year; an incidence which has not presented a reduction in almost a decade.<sup>26, 27</sup> In Michigan there are estimated to be 1100 new cases per year. Most of those cases, 760, are estimated to occur in the region of the state that includes Detroit.

# HIV in Detroit

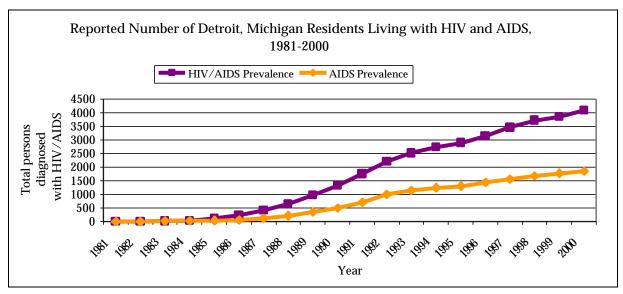


Figure 11

There is no way of knowing the number of new HIV *infections* that exist per year in any population as the virus may incubate for months or years without being diagnosed. Some people with HIV may not be diagnosed until they have progressed to AIDS. The number of new *diagnoses* can be calculated for HIV, though. The number of new diagnoses is the best current measure of how fast the HIV epidemic is spreading across populations. <sup>28</sup>

Geographical regions of Michigan are used as units for monitoring the HIV epidemic and for

program planning. Several counties comprise a region, and several local health department "jurisdictions" may be located in a region. Wayne (including Detroit), Oakland, Macomb, St. Clair, and Monroe counties together are Region 1. Data for Detroit is often separated in a unique way because of the size of the city and the fact that it represents a majority of the Wayne County data. As well, Detroit has its own local health department jurisdiction.

Detroit has a significant impact on HIV infection rates for the rest of the state. By the end of year 2000, there were 4,083 people living with a diagnosis of HIV or AIDS (as shown in Figure 11). Sixty-eight percent of the living HIV/AIDS cases in Michigan reside in Region 1 of the State's surveillance areas. Of those Region 1 cases, Detroit has routinely constituted 65% of the living HIV/AIDS cases. $^{26}$ 

Of the 11,273 persons ever diagnosed with AIDS in Michigan, 5,120 (45%) have been Detroit residents. There are 9,749 reported Michigan residents living with of HIV or AIDS. Detroit residents comprise 4,081 of those reported cases, representing 41.9% of the state's reported cases. The Michigan HIV prevalence is calculated to include as many as 13,500 residents when those cases that have not been reported or have yet to be diagnosed are considered. Detroit's estimated 6,060 HIV positive residents account for 44.8% Michigan's estimated HIV positive residents. While Michigan's estimated prevalence rate is 136 cases per 100,000 residents, an estimated prevalence rate for the city is 637 HIV cases per 100,000 Detroiters.

There are 2,020 Detroiters are living with AIDS, and 2061 are living with HIV. Eighty-eight percent of the Detroit residents living with HIV or AIDS are Black. White residents are 8.8% of those living with HIV or AIDS. Hispanic Detroiters are 2.1% of those living with HIV or AIDS. Seventy two percent of those living HIV or AIDS in Detroit are male; twenty eight percent of are female.

Over forty percent of both the HIV and AIDS cases are men who have had sex with men. The next largest behavior group (33% of AIDS, 27% of HIV) is injecting drug users. Six percent of each AIDS and HIV cases are men having sex with men who are also injecting drug users. Heterosexual residents represent 13% of those living with AIDS and 19% of those living with HIV in Detroit.

Women, particularly those of color, are at increasing risk for HIV. Ninety one percent of Detroit women with HIV or AIDS are Black, 6% are White, 2% are Hispanic, and 1% is of unknown origin. Injecting drug use is the number one mode of HIV transmission for Black women. Their second risk behavior is heterosexual sex, followed by risk that is undetermined.

*Healthy People 2010* has established several HIV/AIDS related objectives. They include reducing AIDS deaths and AIDS cases among the various behavior groups and a developmental objective to reduce HIV infection overall.

<sup>\$\$\$</sup> as of January 1, 2001

Sexual are a broad range of diseases that	ally Transmitted Diseases at are transferred from one p sexual contact.	person to another through

What are sexually transmitted diseases?

Sexually transmitted diseases (STDs) are a broad range of diseases that are transferred from one person to another through sexual contact. They are constituted by roughly fifty different organisms and syndromes.

Why are STDs important health issues for Detroiters?

For several STDs, rates are high in Detroit and other urban areas. The negative effects of some STDs could be reduced by immediate medical attention. Left untreated, though, STDs could have far-reaching consequences in the reproductive and general health of an individual. STDs also facilitate HIV infection; the risk of acquiring and spreading HIV may be 2-5 times greater in people with STDs. <sup>36</sup> Individuals who have been diagnosed with an STD need to notify their sex partners so that they may also be tested and, if necessary, receive treatment.

Although males and females should be aware of various STDs and act to prevent them, there is some differentiation in risk between genders. Females are more commonly asymptomatic after contracting an STD than males. When symptoms do present, they are often not specific. This often results in a delay of seeking care for women until the disease has progressed more. Diagnosis of STDs in female patients is more difficult and takes more time. The structure of the reproductive tract for females is internal. Risk of transmission is higher for females than males, largely due to anatomical differences. Most male conditions can be treated on an outpatient basis. Some STDs lead to Pelvic Inflammatory Disease (PID), which may require inpatient care.

Those who are sexually active could mitigate the impact of these diseases through education and the practice of preventive behaviors. Discussion of the data that are specific to STDs contributes to the prevention cycle by highlighting their importance for public health, stakeholders, and community members.

#### STDs in Detroit

There are many STDs and information specific to each of them is important. This report will cover three major diseases for the Detroit area: syphilis, gonorrhea, and chlamydia.\*\*\*\* As shown in Figure 12, Detroit rates for

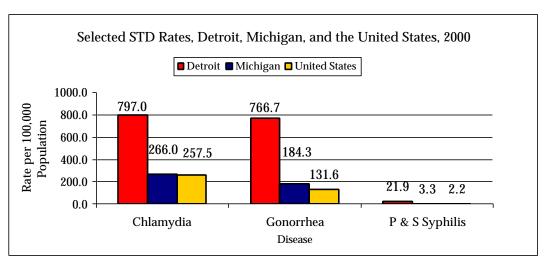


Figure 12

chlamydia, gonorrhea, and syphilis exceed those of Michigan and the United States. Rates for the state and the country are more similar.

### **CHLAMYDIA**

Chlamydia, a bacterial infection, is one of the most common STDs in the United States. It is responsible for an estimated four million national cases each year. Chlamydia can be successfully treated with antibiotics. Due to blocked fallopian tubes and complications of pregnancy, chlamydia is the most common cause of infertility. Perinatal chlamydia infections are a common cause of infant pneumonia and the most common cause of newborn eye infections.

As shown in Figure 13, most statistics reflect disparate numbers and rates of chlamydia between men and women. This is primarily because a lack of testing or reporting for chlamydia among male sex partners of women with chlamydia. New, more sensitive testing methodology may result in more men being tested, diagnosed, and treated for chlamydia. As reporting continues to improve, future rates are expected to be greater, but may more accurately reflect the true incidence in both men and women. Eventually, with enough diagnosis and treatment, rates should decrease. <sup>29</sup>

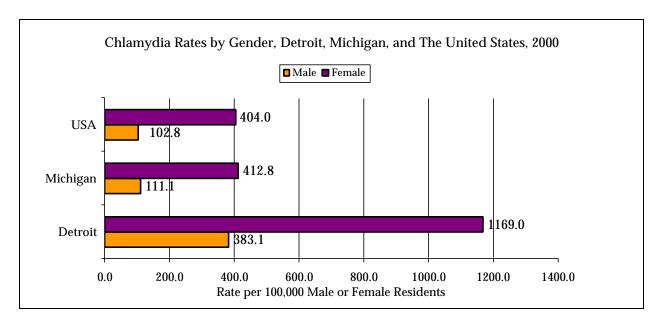


Figure 13

In the United States 702,093 cases of chlamydia were reported in 2000. The rate of reported chlamydia was 257.5 per 100,000 population. Of those cases 80% (563,206) were women. While the rate of chlamydia for men was 102.8 cases per 100,000 males in the United States, the female rate was 404.0 cases per 100,000. Females aged 15-19 suffered the highest rates of chlamydia (2,447 cases per 100,000 females aged 15-19), followed closely by women aged 20-24 (2,286 cases

<sup>\*\*\*\*</sup> HIV is a major disease that is transmitted sexually, but also has other risk categories, such as intravenous drug use. See the HIV and AIDS section of this Profile for further discussion.

per 100, 000 females aged 20-24). Males aged 20-24 had the highest chlamydia rates among men in the United States, with a rate of 555.8 cases per 100,000 males in the age category.<sup>30</sup>

*HP2010* seeks to reduce the proportions of adolescents and young adults who have *Chlamydia trachomatis* infections by increasing the numbers of 15-24 year olds who attend family planning and STD clinics. As well, there is an objective to increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.

State statistics for chlamydia follow the same pattern as the rest of the country. In 2000, there were 26,237 reported cases of chlamydia in Michigan. The rate of reported chlamydia cases was 266.0 per 100,000 residents of all ages. By gender, rates of reported chlamydia are 413 cases per 100,000 female residents and 111 cases per 100,000 male residents. For every male case in the state, there are 4 female cases in the year 2000. Women 15-19 years old have the highest number of reported chlamydia cases in Michigan with 7,992 in 2000. This represents 38% percent of the 20,905 reported cases of chlamydia for Michigan women. There were 5,331 cases reported for men in Michigan.

Detroit accounts for 38.1% of the reported chlamydia cases in Michigan. <sup>31</sup> There were 9,989 Detroit chlamydia cases reported in 2000, with a rate of 1035 cases per 100,000 residents. The rate of reported cases among Detroit males was 513 per 100,000 male residents. For female residents the rate was 1479 cases per 100,000. Females aged 15-19 suffered a rate of 8,543 cases per 100,000 residents in the age category, followed by females aged 20-24 who had a rate of 7,450 reported cases per 100,000. For reported cases among males, those aged 20-24 had the highest number of reported cases reflecting a rate of 2,647 cases per 100,000.

### **GONORRHEA**

Infections due to *Neisseria gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a major cause of pelvic inflammatory disease (PID) in the United States. Occurrence of PID can lead to serious outcomes such as tubal infertility, ectopic pregnancy, and chronic pelvic pain. In addition, epidemiologic and biologic studies provide strong evidence that gonorrhea-related infections facilitate the transmission of HIV infection.

As with chlamydia, reporting of gonorrhea cases is incomplete. In addition, the CDC states that reporting practices for gonorrhea have likely been biased toward reporting of infections in persons of color who attend public STD clinics. Reporting from public sources such as STD clinics may be more complete than reporting from private sources. If populations of color utilize public clinics more than Whites, differences in rates between them may be increased by this reporting bias.<sup>29</sup> As a result, the occurrence of the infection within the population is only one of the factors that affect the number of gonorrhea cases reported.

Following a 73.9% decline in the reported rate of gonorrhea from 1975 to 1997, in 1998 the gonorrhea rate increased and has remained essentially unchanged through 2000. Usually associated with simultaneous testing for chlamydia, increased screening did occur throughout the country during this period. $^{32}$ 

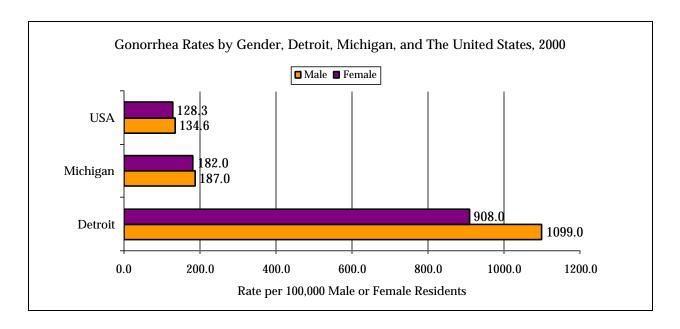


Figure 14

In 2000, 358,995 cases of gonorrhea were reported in the United States; the rate for reported gonorrhea was 131.6 cases per 100,000 population. *HP2010* objectives seek to reduce gonorrhea to 19.0 cases per 100,000 population. Among women in 2000, 15- to 19-year-olds had the highest reported rate of gonorrhea in the United States (715.6 per 100,000), while among men, 20- to 24-year-olds had the highest rate (589.7 per 100,000).

In Michigan, 18,182 cases of gonorrhea were reported in 2000 reflecting a state gonorrhea rate of 184 cases per 100,000 residents. Figure 14 indicates gonorrhea rates by gender. For males the rate of reported gonorrhea was 187 cases per 100,000. Similarly, among Michigan women, the rate was 182 reported cases of gonorrhea per 100,000 women. Gender differences in the state incidence of gonorrhea were more apparent when considered by age category. Specifically in females aged 15-19 the rate of reported cases (880 cases per 100,000 females aged 15-19) was much higher than that of males in same age category (360/100,000). In males aged 25-29 there was a higher rate (518/100,000) than females of the same ages (399/100,000). Females aged 30-44 were half as likely (100 cases per 100,000) to have reported gonorrhea cases in 2000 as men in the same age category (209 cases per 100,000).

Detroit accounts for 52.9% of the gonorrhea cases in Michigan. <sup>33</sup> There were 9,610 cases of gonorrhea reported for Detroit in 2000, reflecting an overall rate of 996 cases per 100,000. The rate for male residents (1099 cases per 100,000 males) of the city was slightly higher than the rate of reported cases for women (908 cases per 100,000 females).

Similar to those for the entire state, there were notable differences among age categories in the male and female rates for gonorrhea in Detroit. More cases of gonorrhea were reported for females aged 0-14 (100 cases per 100,000 female residents aged 0-14) and 15-19 (4,328 cases per 100,000 females aged 15-19) as opposed to males in those categories (12 cases per 100,000 males aged 0-14 and 1,832 cases per 100,000 males aged 15-19). In ages 25-29 and 30-44, more male

cases (3028/100,000 and 1462/100,000 respectively) were reported than female (1836/100,000 females aged 25-29; 573 per females aged 30-44).

#### **SYPHILIS**

Syphilis is a complex sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. Many of the signs and symptoms are indistinguishable from those of other diseases. Syphilis is passed from person to person during vaginal, anal, or oral sex through direct contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Pregnant women with the disease can pass it to the babies they are carrying. Syphilis <u>cannot</u> be spread by toilet seats, door knobs, swimming pools, hot tubs, bath tubs, shared clothing, or eating utensils. There are three stages of syphilis:

#### **¥** Primary Stage

The time between infection with syphilis and the start of the first symptom can range from 10-90 days (average 21 days). The primary stage of syphilis is usually marked by the appearance of a single sore (called a chancre), although there may be several. The chancre is usually firm, round, small, and painless. It appears at the spot where syphilis entered the body. The chancre lasts 3-6 weeks, and it will heal on its own. If adequate treatment is not administered, the infection progresses to the secondary stage.

### **¥** Secondary Stage

The second stage starts when one or more areas of the skin break into a rash that usually does not itch. In addition to rashes, second-stage symptoms can include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and tiredness. A person can easily pass the disease to sex partners when primary or secondary stage signs or symptoms are present.

# **¥** *Late Syphilis*

The latent (hidden) stage of syphilis begins when the secondary symptoms disappear. Without treatment, the infected person still has syphilis even though there are no signs or symptoms. It remains in the body, and it may begin to damage the internal organs. This internal damage may show up many years later in the late or tertiary stage of syphilis. Late stage signs and symptoms include not being able to coordinate muscle movements, paralysis, numbness, gradual blindness and dementia. This damage may be serious enough to cause death.

A single dose of penicillin, an antibiotic, will cure a person who has had syphilis for less than a year. Larger doses are needed to cure someone who has had it for longer than a year. Penicillin treatment will kill the syphilis bacterium and prevent further damage, but it will not repair any damage already done. Persons who receive syphilis treatment must abstain from sexual contact with new partners until the syphilis sores are completely healed.

In 2000, United States primary and secondary (P&S) syphilis cases declined to 5,979 from 6,617 in 1999, a decline of 9.6%. The number of P&S syphilis cases reported in 2000 is the lowest yearly number of cases ever reported. The reported rate of P&S syphilis in the United States in

2000 (2.2 cases per 100,000 persons) was slightly below the rate reported in 1999 (2.4 cases per 100,000), although it is greater than the HP 2010 objective of 0.2 of a case per 100,000 persons.

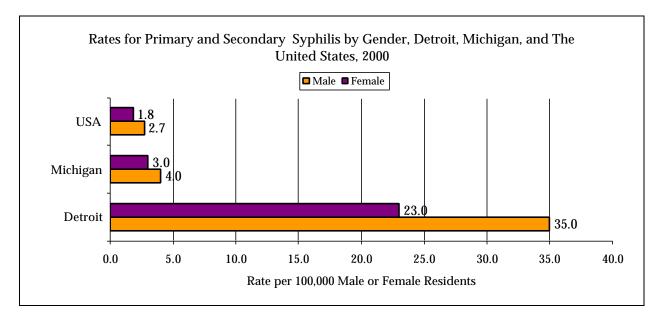


Figure 15

A national campaign is underway, initiated by the CDC, to eliminate syphilis. Consistent with the national plan to eliminate syphilis is the *HP2010* objective of 0.2 cases per 100,000 populations. Much of the county is doing well as demonstrated in Figure 12; representation of the state and national rates are barely visible in the figure, as they were 1.0 and 2.2 per 100,000 residents respectively (See Appendix III for more information regarding syphilis elimination).

Due to continuous increases in the rate of syphilis, the City of Detroit was identified by the CDC as one of nine High Morbidity Areas (HMA) and a primary participant in the CDC's Syphilis Elimination Plan. Detroit accounts for 83.0% of primary and secondary syphilis cases in Michigan.<sup>34</sup> Of Michigan's 990 cases of syphilis (all stages) in 2000, 761 were Detroit cases. For primary and secondary syphilis, which are considered to be better indicators of new cases 274 of Michigan's 330 cases were reported by Detroit.

As shown in Figure 12, Detroit had 28 cases of primary and secondary syphilis per 100,000 residents. Figure 15 demonstrates the excess burden of syphilis for men and women in Detroit as compared to the state and the rest of the country. By gender, there is also a difference, with Detroit males (35/100,000) faring worse than females (23/100,000) in reported primary and secondary syphilis rates. Higher rates in men aged 25-29 and 30-44 may account for this difference.

**CHRONIC DISEASE** 

$\label{cancer} Cancer \\ \mbox{is a term for diseases in which abnormal cells divide without control.}$

#### What is cancer?

*Cancer* is a group of many related diseases that begin in cells, the body's basic unit of life. The body is made up of many types of cells. Normally, cells grow and divide to produce more cells only when the body needs them. This orderly process helps keep the body healthy. Sometimes cells divide without control producing new cells when they are not needed. These extra cells form a mass of tissue, called a growth or tumor.

A tumor can be benign or malignant. Cells from a benign tumor will not spread to other parts of the body and are rarely a threat to life. Benign tumors <u>are not</u> cancer. Cancer is a term for diseases in which abnormal cells in malignant tumors divide without control and continue to do so when new cells are not needed. They can invade and damage nearby tissues and organs.

Cancer can begin in many areas or sites of the body. Most cancers are named for the organ or type of cell in which they begin. Lung cancer, for instance, is cancer that begins in the lung, and cancer that begins in cells in the skin is called melanoma. Also, cancer cells can break away from a malignant tumor and enter the bloodstream or the lymphatic system. That is how cancer spreads from the original cancer site to form new tumors in other organs. The spread of cancer is called *metastasis*. 35

Why is cancer an important health issue for Detroiters?

Awareness of cancer risks and taking precautions for early detection are critical. Over time, cancer has a significant impact on a person's health. There is no cure, although science continues to develop information for understanding cancer, and improving treatment options. The progression of the disease creates costs in various areas of life for those who have cancer conditions. As cancer progresses, a patient experiences more pain, needs more treatment, and loses the capacity to function as healthy individuals do.

Ultimately, cancer can be a fatal condition. Cancer has consistently been the second leading cause of death in Detroit, the State of Michigan, and the United States. In many cases, if diagnosed in an early stage, it is more likely that treatment will be effective and the patient will live a longer life. The more we can learn about what causes cancer, the more likely we are to find ways to manage and prevent it.

The health community does not fully understand why people develop cancer. It is clear, though, that cancer cannot be caused by an injury. Being infected with certain viruses may increase the risk of some types of cancer, but cancer is not contagious. Cancer develops over time. It is a result of a complex mix of factors related to lifestyle, heredity, and environment.

A number of factors that increase a person's chance of developing cancer have been identified. Many types of cancer are related to the use of tobacco, what people eat and drink, exposure to ultraviolet (UV) radiation from the sun, and, to a lesser extent, exposure to cancer-causing agents in the environment and the workplace. Some people are more sensitive than others to factors that can cause cancer. Some cancer risk factors can be avoided. Others, such as genetic factors, are unavoidable, but it may be helpful to be aware of them. People can help protect themselves by avoiding known risk factors, having regular checkups, and discussing with health care providers whether any of the cancer screening tests could be of benefit to them. <sup>34</sup>

#### Cancer in Detroit

During the 1990s, national rates of cancer deaths and diagnoses declined. Michigan cancer deaths were fairly stable throughout the nineties, hovering between 21.7 (deaths per 10,000 residents) in 1990 and 20.5 in 2000. Detroit rates declined. as well: the 2000 rate (21.6) was slightly higher than all Michigan residents (See Figure 16).††††

The Michigan cancer incidence rate (49.2 cases per 10,000 residents) remains below the 1991 and 1992 peak of 54.8 per 10,000 persons (as shown in Figure 17). While the age adjusted incidence rate for Michigan had fallen to 48.8 in 1998, the incidence for Detroit was 53.4; just below Michigan's peak rate in

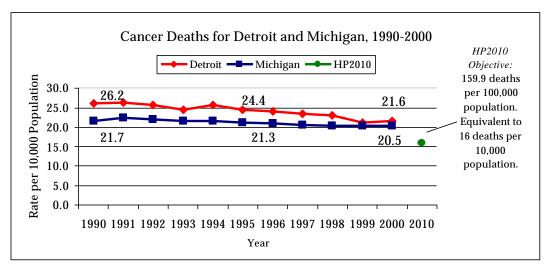


Figure 16

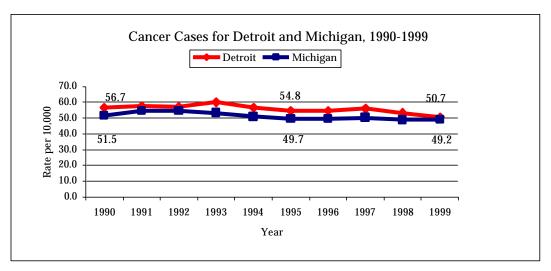


Figure 17

titit Though general statistics are discussed, United States level data are not presented in figures for this report. The most recent United States level cancer data (1997/1998) is not comparable to current Detroit and Michigan data due to differences in the age adjustment standard. Cancer data for Detroit and Michigan for 1999 and 2000 were drawn from Michigan Department of Community Health (MDCH), Division for Vital Records and Health Statistics. Rates are age -adjusted and were computed by the direct method, using as the standard population the age distribution of the total population of the United States for the year 2000. Underlying causes of death for 1990-1998 were classified in accordance with the Ninth Revision of the International Classification of Diseases (ICD-9). Beginning in 1999, causes of death were classified using ICD-10. Comparability is high between the cancer classifications from ICD-9 and 10. According to MDCH, the change should have little or no impact on mortality rate comparisons over time.

1991 and 1992. Detroit's peak cancer incidence rate was 60.0 in 1993. In 1999, the Detroit cancer incidence rate was, 50.7, the lowest in the decade.

HP2010 seeks to reduce cancer deaths to 16 deaths per 10,000 population in the year 2010. ####

Many areas of the body can develop cancerous cells, and the disease may present in various ways depending upon the function of the organ(s) and tissues affected. The remainder of this report will focus upon lung, colon, breast and prostate cancers, as mortality rates have been highest for Detroit residents at these sites.

# **LUNG CANCER**

Lung cancer, as well as prostate, breast, and colorectal cancers presented higher rates in Detroit than in Michigan in 2000. Lung cancer is the second leading cancer diagnosis, and the leading cause of cancerrelated death for Detroit and the rest of the country.

Tobacco use, increasing age, a family history of lung cancer, exposure to asbestos or other cancer-causing agents in the environment or workplace are all risks that may result in lung cancer. <sup>36, 37</sup> Yet, more than 95 percent of diagnoses are thought to result from tobacco use.

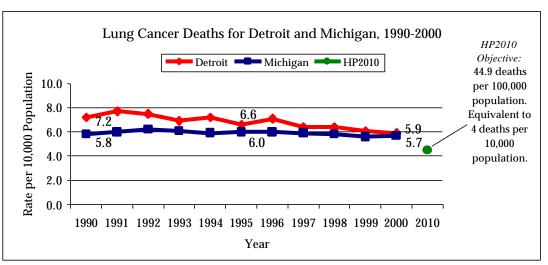


Figure 18

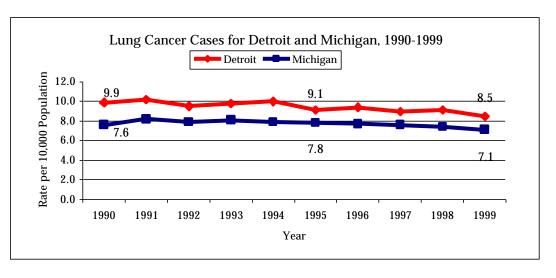


Figure 19

<sup>\*\*\*\*\*</sup> Throughout this report, Detroit and Michigan rates are expressed "per 10,000" in the respective populations and is not to be confused with rates that are expressed per 100,000. National *HP2010* objectives related to cancer have been translated from "per 100,000" to "per 10,000" expressions to aid *Profile* users of this section. Please see *HP2010* notes in the charts for "per 100,000" expressions.

According to the National Cancer Institute, tobacco use is the most preventable cause of death in the United States. Each year smoking tobacco, smokeless tobacco, and the inhalation of environmental ("second-hand") smoke are responsible for one third of the cancer death total in the United States.<sup>35</sup> Nonetheless, 72 percent of Michigan high school students and nearly 67 percent of the Detroit students who participated in a 1999 national survey reported using a cigarette in their lifetime. Twenty seven percent of the Michigan students and 10 percent of the Detroit students reported having smoked cigarettes *daily*.<sup>12</sup> Non-smoking spouses of smokers have a 30 percent greater risk of developing lung cancer than spouses of non-smokers.<sup>36</sup> Smoking is the leading risk factor for lung cancer, and accounts for more than 85 percent of all lung cancer deaths.<sup>37</sup>

In the Detroit, lung cancer deaths have shown some decline since 1997, contributing to relatively stable rates through 2000 for the entire state (see Figure 18). In 2000, the city and state rates were very close, at 5.9 and 5.7 per 10,000 residents respectively. Though higher than Michigan rates, the incidence of lung cancer has shown a decline for the fifth consecutive year in Detroit (see Figure 19). The 2000 lung cancer incidence rates were 8.5 in Detroit and 7.1 for the state.

# **PROSTATE CANCER**

Prostate cancer has been the most frequently diagnosed cancer in Michigan since 1991. It was the second leading cause of cancer deaths among Michigan men in 1998. Almost 70% of Michigan men diagnosed with prostate cancer in 1997 were between the ages of 50 and 74, and more than 27% were 75 years old or older.38

Factors that have been associated with risk for prostate cancer include age (prostate cancer is found mainly in men over 55 years of age), a close family history of prostate cancer, and a high-fat diet.<sup>39</sup> The age

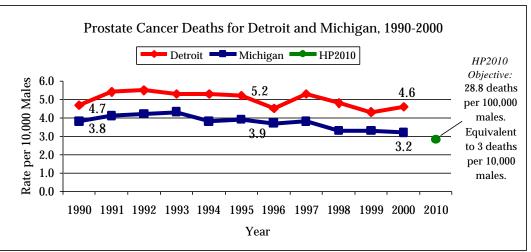


Figure 20

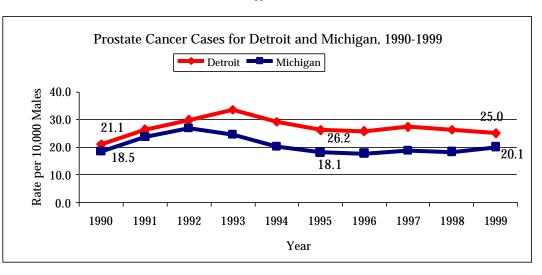


Figure 21

adjusted prostate cancer mortality rate dropped slightly from 3.3 in 1998 and 1999 to 3.2 deaths per 10,000 men throughout Michigan in 2000 (as shown in Figure 20). The mortality rate increased, however, for Detroit men from 4.3 in 1999 to 4.6 in 2000.

In 2000, Detroit and Michigan incidence rates for prostate cancer exceeded those of lung, breast and colorectal cancer. Even more striking is the contrast between Detroit and Michigan prostate cancer rates. An average of 6 more men per 10,000 in Detroit were diagnosed with prostate cancer from 1990 to 1999. As shown in Figure 21, the incidence of prostate cancer in Detroit has exceeded that of the rest of the state throughout the 1990s. There was more disparity between the city and the state rates in the early to mid nineties. Michigan rates for prostate cancer peaked in 1992 at 26.9, and began to show a steady decline beginning in 1993. Detroit rates peaked in 1993 at 33.4 per 10,000 men, and began to decline in 1994. From 1995 to 1999, the rate for Detroit men slightly decreased from 26.2 to 25 new cases per 10,000 Detroit men, while the rate for all Michigan men increased from 18.1 to 20.1 male residents.

The difference is related to the higher proportion of Detroit men who are Black. Black males have the highest incidence of prostate cancer in the world and suffer 2-3 times higher mortality than their White counterparts. <sup>40</sup> According to the 2000 Census, Detroit's population was 81% Black. Similarly, 80% of the city's men were Black. In contrast, 80% of the state population was White; 80% of the state's men were White. More than half (53%) of the Black men in Michigan were Detroit residents in 2000. For the most part, excessive prostate cancer risk and mortality for Black men is not understood.

*HP2010* seeks to reduce deaths prostate cancer deaths to 3 per 10,000 men.

## **BREAST CANCER**

Breast cancer is the most frequently diagnosed cancer among Michigan women and third most commonly diagnosed cancer overall. 41 Every woman is at risk for developing breast cancer, but some factors contribute to increased risk, including:

increasing age, history of breast cancer in an

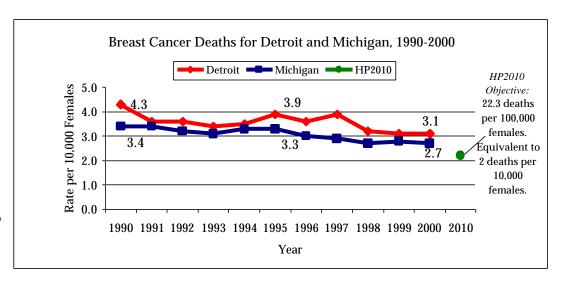


Figure 22

immediate family member, never giving birth, or having the first child after age 30, and a long menstrual history. Some breast cancer is inherited due to strong genetic factors. <sup>50</sup>

As with many cancers, when breast cancer is diagnosed at an early stage, it is most treatable. All women should do a self-exam every month. In addition to a monthly self-exam, it is recommended that women under the age of forty receive a clinical breast exam every three years.

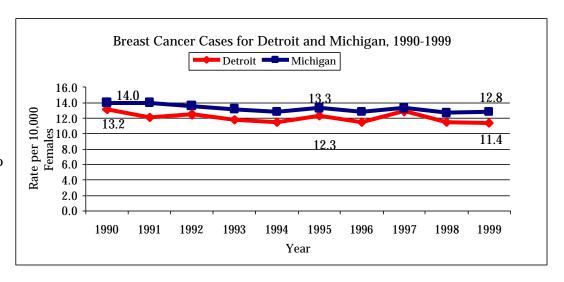


Figure 23

Detroit's breast cancer death rates throughout the 1990s to 2000 were more variable and higher than those for the entire state (see Figure 22). In 2000, there were 3.1 deaths per 10,000 Detroit women and 2.7 deaths per 10,000 Michigan women. From 1990, there was an overall decrease in breast cancer mortality in Detroit and the rest of the state. Breast cancer incidence throughout the nineties was higher for Michigan women overall than for Detroit women. In 2000, 11.4 breast cancer cases per 10,000 Detroit women were diagnosed, while 12.8 cases were diagnosed for women throughout the state.

Higher incidence rates for breast cancer in the state (as shown in Figure 23) and higher mortality rates for breast cancer in the city are largely due to population differences. White women have the highest incidence of breast cancer, but women of color have the highest mortality rates. Black women, for instance, are 31% more likely than White women to die from breast cancer. This is partly due to a tendency for later diagnosis among Black women, which is less treatable.<sup>42</sup> Yet Black women show lower survival rates in comparison to other women at the same stage of diagnosis.<sup>50</sup>

From the 1997 baseline of 67%, *HP2010* seeks to increase the proportion of women aged 40 years and older who have received a mammogram during the 2 preceding years to 70%. The HP 2010 objective for breast cancer deaths seeks to reduce deaths to 22.3 deaths per 100,000 women. As Detroit and Michigan rates are expressed per 10,000 population, this equals 2 deaths per 10,000 female residents.

### **COLON**

Colorectal cancer is the second leading cause of cancerrelated death in Michigan. 43,§§§§ Factors that have been associated with the development of colon cancer include: a family history of colon cancer, a history of polyps (benign tumors that often precede colon cancer) inflammatory bowel disease, a diet high in fats or low in fiber, and a low level of physical activity. In some instances, colon cancer is also hereditary.52

The peak colorectal cancer death rate was 3.1 at the beginning of the 1990s, as shown in Figure 24. Though the city's colorectal cancer death rate has not been as high since,

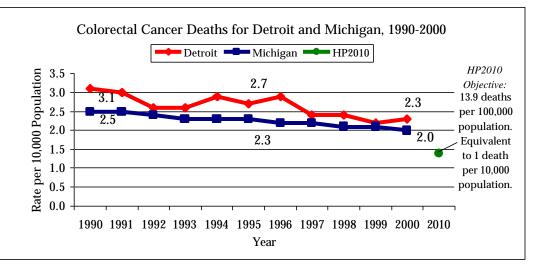


Figure 24

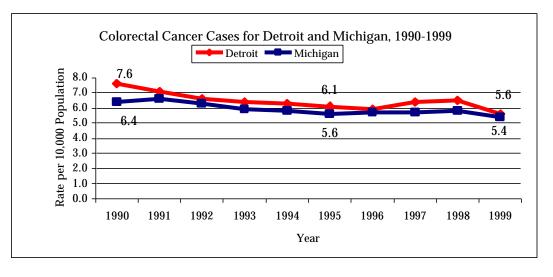


Figure 25

there have been several slight increases and declines. Since 1998, rates have decreased and 2.3 colorectal cancer deaths per 10,000 Detroit residents were recorded for 2000. Overall, there have been modest and steady declines in Michigan colorectal cancer deaths throughout the nineties to 2000. The rate has decreased from 2.5 per 10,000 Michigan residents in 1990 to 2.0 in 2000. *HP2010* seeks to reduce colon cancer deaths to 1 per 10,000 population. Colorectal incidence rates for years 1990-1999 are shown in Figure 25. For the State of Michigan, incidence has been fairly stable since the mid-nineties. Detroit rates of colon cancer incidence showed increases from 1996-1998, but decreased from 1998 (6.5 per 10,000 Detroit residents) to 1999 (5.6).

ssss The colon and rectum are parts of the body's digestive system, which removes nutrients from food and stores waste until it passes out of the body. Together, the colon and rectum form a long, muscular tube called the large bowel or intestine. The colon is the first 6 feet of the large intestine, and the rectum is the last 8 to 10 inches. Cancers of these two areas are often discussed together as colorectal cancer.

 $\label{lem:cardiovascular} Cardiovascular\ Disease$  refers to the impairment of the heart and blood vessels.

#### What is cardiovascular disease?

Cardiovascular disease refers to the impairment of the heart and blood vessels. The four most common types of cardiovascular disease are high blood pressure, coronary heart disease (which includes heart attack and angina pectoris or chest pain), stroke and rheumatic fever/rheumatic heart disease.<sup>44</sup>

A *stroke* can be thought of as a "brain attack"; it is a form of cerebrovascular disease that affects the brain's arteries. It occurs when an artery bringing oxygen- and nutrient-rich blood to the brain becomes clogged or ruptures. The brain needs a constant flow of blood to keep it working properly. When a stroke occurs, the blood supply is disrupted, and brain cells are starved of oxygen, causing cell death in the immediate area. This area of dead cells is called an infarct. These cells usually die within minutes to a few hours after being deprived of oxygen.<sup>45</sup>

Why is cardiovascular disease an important health issue for Detroiters?

Though it includes a range of diseases involving the circulatory system and major organs, the primary components of cardiovascular disease are heart disease and stroke. They are the first and third leading causes of death in the United States, accounting for more than 40% of all deaths. About 950,000 Americans die of cardiovascular disease each year. Although cardiovascular disease is often thought to primarily affect men and older people, it is a major killer of women and people in the prime of life. More than half of all cardiovascular disease deaths each year occur among women.

Three health-related behaviors practiced by people every day contribute markedly to cardiovascular disease:

- *Tobacco use.* Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from cardiovascular disease, or about 190,000 deaths a year, are smoking-related. Every day, more than 3,000 young people become daily smokers.
- Lack of physical activity. People who are sedentary have twice the risk for heart disease of those who are active. More than half of U. S. adults do not achieve recommended levels of physical activity.
- *Poor eating habits*. Only 18% of women and 20% of men report eating five servings of fruits and vegetables each day. Almost 60% of U.S. adults are overweight or obese. People who are overweight have a higher risk for cardiovascular disease.

Modifying these behaviors is critical both for preventing and for controlling cardiovascular disease. Other steps that adults who have cardiovascular disease should take to reduce their risk of death and disability include adhering to treatment for high blood pressure and cholesterol, learning the symptoms of heart attack and stroke, and seeking help as soon as these symptoms arise.<sup>46</sup>

In addition to being the leading cause of death nationwide, heart disease was also the leading cause of death in Michigan, and Detroit in 2000. Stroke was the third leading cause of death. Though some people inherit a predisposition to developing cardiovascular disease, it is preventable. By enhancing community awareness of risks, and developing and implementing effective prevention strategies, Detroiters may mitigate the impact cardiovascular disease is having on the health status of the community. Certainly, for those who already have cardiovascular disease, knowledge, aggressive management and proper treatment can prevent deaths.

Blood pressure is the force of blood pushing against blood vessel walls. "High blood pressure", also known as hypertension, directly increases the risk of coronary heart disease (which leads to heart attack) and stroke, especially along with other risk factors. It is particularly common in people who are Black, middle-aged, elderly, obese or heavy drinkers.<sup>47</sup>

Cardiovascular Disease in Detroit

According to the American Heart Association. mortality figures are the most accurate data available for assessing the impact of cardiovascular disease and stroke. Though other statistics, such as prevalence and incidence, are estimated, mortality figures are compiled from death certificates.48

As shown in Figure 26, heart disease deaths for Detroit have consistently been higher than those for the entire state, though both declined throughout the 1990s. By the end

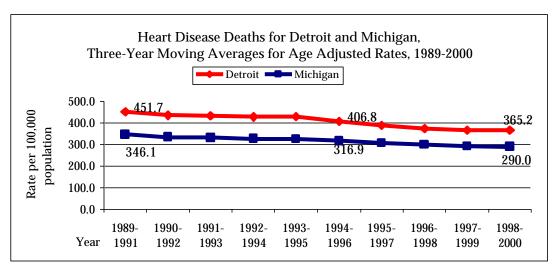


Figure 26

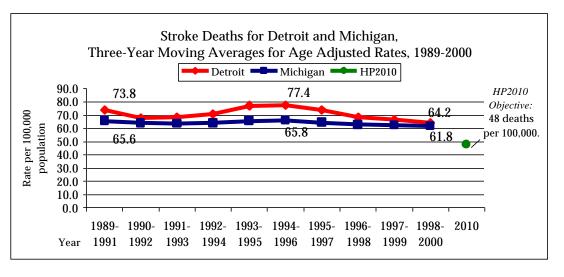


Figure 27

of the decade, deaths in Detroit (365.2 per 100,000 residents) were still higher than they were for Michigan from 1989 -1991 (346.1 per 100,000 residents).

According to the three-year moving averages shown in Figure 27, Detroit experienced a slight decline in stroke deaths in the early 1990s and increases in the middle of the decade. Stroke deaths for the state were relatively stable, showing slight increases in the mid-1990s. By 1998-2000, stroke deaths for Detroit had declined considerably (64.2 per 100,000 population) and the state rate had declined moderately (61.8 per 100,000). Detroit rates have been above the state as a whole, but decreased significantly.

A consideration of deaths alone understates the burden of cardiovascular disease. About 61 million people in the United States (almost one-fourth of the population) live with cardiovascular disease. Heart disease is a leading cause of disability among working adults. Stroke accounts for disability among more than 1 million people in the United States. Almost 6 million hospitalizations each year are due to cardiovascular disease.

Cardiovascular diagnoses are a major cause of preventable hospitalizations in Michigan.\*\*\*\*\* Congestive Heart Failure (CHF), a condition in which the heart can't pump enough blood to the body's other organs, is one of the leading diagnoses for preventable hospitalizations in Michigan and for the City of Detroit.<sup>49,50</sup> There was a total of 235,540 preventable hospitalizations for Michigan in 1999. There were 40,003 for the City of Detroit. In 1999, 16.6% of Michigan's and 16.8% of Detroit's preventable hospitalizations were due to CHF.

When the heart's muscle does not get as much blood as it needs, a person may experience pain or discomfort in the chest due to coronary heart disease, which is known as Angina. $^{51}$  Angina is and the ninth leading diagnosis for preventable hospitalizations for the state of Michigan (2.8%) the tenth in the city (2.3%). $^{59}$ 

*HP2010* has a number of objectives relative to cardiovascular disease. One objective is to reduce coronary heart disease deaths to 166 per 100,000 persons in the United States. From 1988 to 1994, 28% of adults aged 20 and over in the United States had high blood pressure. By 2010, the *HP2010* objective is to have lowered that percentage to 16. Similarly, *HP2010* seeks to increase to 50% the proportion of adults with high blood pressure whose blood pressure is under control. As shown in Figure 28, *HP2010* seeks to reduce the number of deaths due to stroke to 48 deaths per 100,000.

-

<sup>\*\*\*\*\*</sup> Preventable Hospitalizations are hospitalizations for conditions where timely and effective ambulatory care can decrease hospitalizations by preventing the onset of an illness or condition, controlling an acute episode of an illness or managing a chronic disease or condition.

Diabetes is a chronic disease for which a person has either a shortage of insulin or a decreased ability to use insulin. Insulin is a hormone secreted by the pancreas that is needed to convert sugar, starches and other food into energy needed for daily life.

### What is diabetes?

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. There are two major types of diabetes:

- *Type 1* A disease in which the body does not produce any insulin, most often occurring in children and young adults. People with type 1 diabetes must take daily insulin injections to stay alive. Type 1 diabetes accounts for 5 to 10 percent of diabetes.
- Type 2 Type 2 diabetes is the most common form of the disease. It is a metabolic disorder resulting from the body's inability to make enough, or properly use, insulin. Type 2 diabetes accounts for 90 to 95 percent of diabetes. Type 2 diabetes is nearing epidemic proportions in the United States, due to an increased number of older people, and a greater prevalence of obesity and sedentary lifestyles.<sup>52</sup>

Why is diabetes an important health issue for Detroiters?

With its complications -- blindness, kidney disease, amputations, heart attack and stroke -- diabetes is the seventh leading cause of death (sixth-leading cause of death by disease) in the United States. The cause of diabetes is unknown, although both genetics and environmental factors such as obesity and lack of exercise seem to increase risk. Other risks for diabetes include age greater than 40, non-White race, a diet high in fats and low in fruits, vegetables and fiber, and a family history of diabetes.

Though it can be controlled, diabetes is a chronic disease that has no cure. According to the American Diabetes Association, 16 million people in the United States have diabetes, and 5 million of those individuals have not been diagnosed. Approximately 2.3 million or 10.8% of all Black s have diabetes, however, one-third of them do not know it. Blacks are 1.7 times more likely to have diabetes, than Whites. Twenty-five percent of Blacks between the ages of 65 and 74 have diabetes. One in four Black women over 55 years of age has diabetes.

Once an individual has been diagnosed with diabetes, proper management is critical. A diabetic person may experience several serious health complications such as: blindness, kidney disease, heart disease and stroke, nerve disease and amputations, and sexual dysfunction. Blacks experience higher rates of at least three of those complications: blindness, amputation and kidney failure.<sup>53</sup>

Though type 2 diabetes has generally been diagnosed among adults, a growing number of children and adolescents are developing this kind of diabetes. This is of particular concern for the Detroit population, as children of Black, Hispanic, and Native American race/ethnicity have been diagnosed more often. Recent reports indicate that 8-45% of children with newly diagnosed diabetes have type 2 diabetes. However, since type 2 diabetes in children and adolescents is a relatively new phenomenon, accurate statistics regarding the number of cases have not been generated.

There are some characteristics that are more common among children diagnosed with type 2. The emerging epidemic of type 2 diabetes in children parallels an increasing prevalence of

obesity. <sup>54</sup> As many as 80% of the children who have been diagnosed with type 2 diabetes were overweight at the time of diagnosis. Most of the children diagnosed have been older than 10 years of age and are in puberty, though younger cases have been documented. Children that have been diagnosed have also had family histories of type 2 diabetes. <sup>55</sup>

#### Diabetes in Detroit

Diabetes is one of the leading diagnoses for preventable hospitalizations in the city and statewide. Consistent with the average annual rate for years 1991-1998, diabetes accounted for about 10.8 of all 1999 preventable hospitalizations per 10,000 residents in the state of Michigan. For Detroit, diabetes accounted for 25 preventable hospitalizations per 10,000 residents. For residents aged 65 and older, the preventable hospitalization rate for diabetes in Detroit (52 per 10,000 residents) doubles the rate for Michigan (24 per 10,000 residents). <sup>59</sup>

The Michigan Department of Community Health estimates that 436,000 Michigan residents have been diagnosed with diabetes, of which 60,150 are Detroit residents. National studies estimate that as many as 213, 4000 additional Michigan residents, including 23,220 Detroiters, are unaware that they are diabetic.<sup>56</sup>

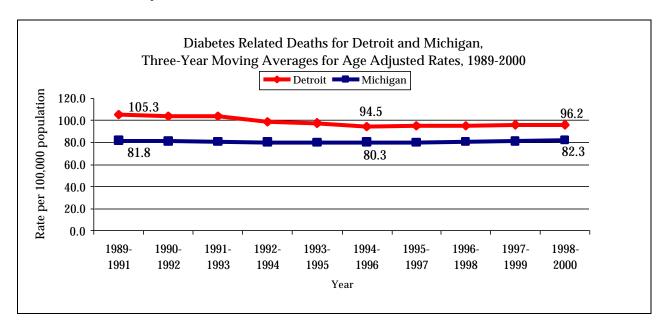


Figure 28

As represented by the chart above, the 1989-1991 three-year average rate for Detroiters exceeded the state rate by more than 20 individuals per 100,000 in the respective populations. Over the decade, the state rate slightly declined and then hovered at a fairly consistent rate until 1997-1999 (81.3) where there is a slight increase from 1996-1998 (80.5). Detroit's rate dropped considerably over the decade as well, but also experienced increases from 1996-1998 (95.0 deaths per 100,000 Detroit residents) to 1997-1999 (96.2). From 1998-2000, 96 persons per 100,000 Detroit residents died from causes related to diabetes while 82.3 per 100,000 Michigan residents died.

*HP2010* has several objectives related to diabetes including the prevention of diabetes and reducing cases to 2.5 new cases per 1,000 population per year. The reduction of the diabetes death rate and of diabetes related deaths among those who have diabetes are objectives as well. The reduction of morbidity related to diabetes and the improvement of management are evident in several objectives.

BEHAVIORAL HEALTH

Substance Abuse is often referred to as "drug abuse". It is a generic term for a condition in which an individual takes body and/or mind altering substances in an ongoing harmful and compulsive manner that eventually harms the body.

### What is substance abuse?

Substance abuse (often referred to as drug abuse) is a generic term for a condition in which an individual takes body and/or mind altering substances in an ongoing harmful and compulsive manner that eventually harms the body. It is generally recognized that substance abuse involves two aspects of addiction common to most types of drug dependence:

- \*\* Psychological dependence characterized by a feeling of satisfaction or euphoria and a desire to repeat the administration of the drug in order to produce pleasure or avoid pain, and
- \*\* Physical dependence is a condition of physical adaptation to a drug accompanied by a development of tolerance for it; withdrawal symptoms are common when the drug is withheld, characterized by intense physical disturbance and discomfort. <sup>57</sup>

Why is substance abuse a health issue for Detroiters?

Substance abuse is a health concern in itself; it is related to a host of other conditions. For example, injecting drug use (IDU) is a significant risk category for HIV.†††† Alcohol abuse leads to organ damage, particularly to the liver. Tobacco use, including loose tobacco, cigarettes, and cigars, is perhaps the most common form of substance abuse. It is addictive both psychologically and physically, due to the effects of nicotine, and is proven to be damaging to health. Tobacco use is the leading cause of lung cancer deaths in the United States.<sup>66</sup>

Without treatment, substance abuse is can become a chronic condition, and in sustained or severe cases can result in death. A survey of many of the nations largest cities ranks Detroit, fifth for deaths related to substance abuse. <sup>58</sup> Drug treatment data is a direct indicator of substance abuse, but does not reflect the actual level of substance abuse in the community, which is difficult to measure. Other less direct indicators include drug deaths, illness related to drug use, criminal activity involving illicit drugs, and funding directed toward prevention and treatment. <sup>59</sup> None of these measures, however, demonstrate the community level problems and negative life circumstances that are created for Detroit families when individuals are addicted.

### Substance Abuse in Detroit

For residents of the City of Detroit, there were 218 drug-induced deaths in 2000. Thirty-nine percent of those who died were female, though most of the deceased were male (61%). Eighty percent were Black, while 18.8% were White, and less than 1% were to Hispanic residents. <sup>60</sup> Of the 14,598 persons admitted for substance abuse treatment through the Detroit Health Department between October 1, 2000 and September 30, 2001, 55% successfully completed treatment. The leading substances for which clients have been treated include heroin, cocaine, alcohol, and marijuana. These substances will be further discussed in the remainder of the report as well as youth attitudes regarding substance abuse.

<sup>†††††</sup> Please see the HIV/AIDS *Profile* section for more information regarding the relationship between IDU and HIV.

# **HEROIN**

Heroin is the leading drug used by those who seek substance abuse treatment in the City of Detroit. Forty-five percent of the 14,598 individuals who were admitted for substance abuse treatment in FY2000/2001, were treated for heroin addiction. ††††‡‡, 61 Similarly, MDCH reports that heroin was the primary drug among treatment admissions for FY2000/2001 accounting for 34% of admissions throughout Wayne County and 14% of all Michigan treatment admissions. DAWN reports that ED mentions for heroin have also gradually increased in the metropolitan Detroit area since 1992. The rate of mentions for heroin in 1999 was 61.5 per 100,000 in contrast to 75.8 in 2000.

### **COCAINE**

#### ALCOHOL

Alcohol is third most common addiction for treatment in Detroit, comprising 18% of the 14,598 admissions for FY2000/2001. Most clients who seek substance abuse treatment through the Detroit Health Department specify a primary drug with no secondary drug choice. Of those who report a secondary drug, alcohol is most frequently identified, indicating alcohol use in combination with other substances.

#### MARIJUANA

Six percent of Detroit substance abuse treatment admissions in FY2000/2001 were for marijuana. DAWN reports that ED mentions regarding marijuana have been steady throughout the 1990s in the Detroit metropolitan area, and have typically involved males aged 20-25 years of age. Among marijuana treatment admissions for Wayne County, MDCH reports that 26% were less than 21 years of age. For statewide admissions 36% were under 21 years old.

<sup>‡‡‡‡‡</sup> For substance abuse the State of Michigan reports data per fiscal year (FY), not per calendar year. FY2000/2001 includes dates October 1,2000 through September 30, 2001.

SSSSS The term ME drug mention (or ME mention) is used to refer to a substance or drug that is reported ("mentioned") in a drug abuse death submitted to DAWN. As many as 6 drugs, plus alcohol-in-combination, can be reported on each case. Thus, the number of ME drug mentions will always equal or exceed the number of ME episodes.

# YOUTH RISK BEHAVIOR SURVEY

Results from the Youth Risk Behavior Survey point to the need for ongoing intense drug prevention in Detroit. Forty-four percent of the Detroit high school participants reported using marijuana one or more times during their lives. This was slightly below response to the same question by high school students throughout the state (46.4%), which included the students from Detroit. While 8.1% of the students in Michigan used any form of cocaine, 3.4% of the Detroit students confirmed cocaine use. Alarmingly, 32.6% of the Detroit and 33.7% of all Michigan participants had been "offered, sold, or given an illegal drug on school property by someone" during the 30 days prior to the survey.

can be defined as a physical assaul	<i>Violence</i> lt that carries a significant risk of i	njuring or killing a
	person.	

#### What is violence?

Violence can be defined as a physical assault that carries a significant risk of injuring or killing a person. Four acts are generally considered as violence according to the United States Department of Justice:

#### ₩ Homicide:

The willful killing of one human being by another.\*\*\*\*\*

#### **¥** *Robbery*:

The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or putting the victim in fear.

### **¥** *Aggravated Assault*:

An unlawful attack by one person upon another wherein the offender uses a weapon or displays it in a threatening manner, or the victim suffers obvious severe or aggravated bodily injury involving apparent broken bones, loss of teeth, possible internal injury, severe laceration, or loss of consciousness.

## **¥** Forcible Rape:

The carnal knowledge of a person, forcibly and/or against that person's will, or not forcibly or against the person's will where the victim is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity (or because of his/her youth).

Why is violence an important health concern for Detroiters?

Violence is an indicator of the well being of a community, as it is related to factors such as substance abuse, poverty, and overall mental health. Though no community is immune to violent acts, there are populations for which they occur more often. This is particularly true for urban areas such as Detroit. Acts of violence, such as homicide, robbery, assault, and rape threaten the physical and mental health of victims. Violent behavior throughout a population and with high frequency also threatens community health.

The mental health of persons who tend toward violence is at risk; as well, there is the increased possibility of physical injury or death from engaging in dangerous activities. As violence is illegal, it may also result in judicial penalty and incarceration. Key populations for which prevention efforts are targeted include: adolescent and adult women, youth in general, and employees who interact in the workplace.

Violence involving adolescents and young adults, in particular, has been undertaken as a public health issue. In a report released in 2001, *Youth Violence: A Report of the Surgeon General*, Dr. David Satcher highlights a youth violence epidemic, promoted by easy access to weapons (particularly firearms), from 1983 to 1993. The *Report* states that since 1993, there have been

<sup>\*\*\*\*\*\*</sup> Homicide due to "legal intervention" is not a criminal act. An example of legal intervention would be the shooting of an individual by an officer in the line of duty. Legal intervention homicides are not included in the Detroit statistics of this report.

declines in youth violence as shown by arrest records, victimization data, and hospital emergency room reports. Yet, as noted in the *Report*, different sources of youth violence trends are contradictory. Dr. Satcher highlighted that self-reported violence among youth has not changed. The remainder of this report will focus upon homicide, firearm use, non-lethal violent crimes and victimization, and attitudes regarding violence among youth. ††††††

Youth Violence in Detroit

#### HOMICIDE AND FIREARMS

The MDCH Violence Prevention Section reports that homicide has been one of the top five leading causes of death in Michigan since the 1950's. For 15-19 years olds, Michigan's homicide rate is nearly one and a half times that of the nation. Michigan Black males aged 15-24 were 30 times more likely to be murdered than White males of the same age.

On average, more than 1,300 Michigan residents died from firearm related injuries each year from 1989 to 1998. Over half (51%) of them were homicides. Though residents aged 15-34 comprised 30% of the state's population, 54% of all Michigan firearm fatalities were in the 15-34 age group. Black residents suffered a disproportionate risk of homicide by firearm. For the state, 80% of the Black male homicides were firearm-related in contrast to 56% of the homicides of other Michigan residents. Though Black males aged 15-34 were 2.2% of the state population, they represented 50% of the state's firearm homicide victims. Black females aged 15-24 had a firearm homicide rate that was 13 times the rate for White females in the same age group. <sup>64</sup>

Of all deaths of Detroit residents in 2000, chronic diseases including heart disease, cancer, and cerebrovascular disease were the top three leading causes of mortality. Accidents and homicides were the fourth and fifth leading causes of death respectively. For young Detroit residents aged 15-34, however, homicide is the number one cause of death. Figure 29 reflects homicide numbers among Detroit unnatural deaths that occurred in 2000, by age group. !!!!!!.65

The *Surgeon General's Report* states that some youth exhibit an "early-onset" of violent behavior before puberty due to childhood factors and possibly lifelong exposure to and involvement in violent behavior. A disproportionate number of Detroit youth may have such early exposure. This may result in their involvement in increasingly more lethal means of violence which produce the alarming number of violent deaths that occurred in 2000 for residents aged 15-34.

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tittiti Specific age ranges are referenced throughout discussion of the youth violence data. Various agencies reporting youth violence data have used different age ranges. The *Bureau of Alcohol, Tobacco, and Firearms (ATF)*, for example, uses the following terms: "juvenile" for persons aged 17 and under, "youth" for persons aged 18-24, and "adult" for persons aged 25 and older. According to the *Michigan State Police*, a "juvenile" is anyone aged 16 and under; ages 17 and over are "adults." The reference to "youth" in the *Youth Violence: A Report of the Surgeon General* includes "children and adolescents aged 10 through high school." The purpose of this report, however is to convey the impact of community violence for pre-pubescent children through young adults. Therefore, the term "youth" in this report encompasses persons as young as 10 and as old as 24.

<sup>#####</sup> Unnatural deaths, are deaths other than ones caused by chronic disease or other health problems. For purposes of the *Profile*, unnatural deaths include homicides, suicides, and accidents.

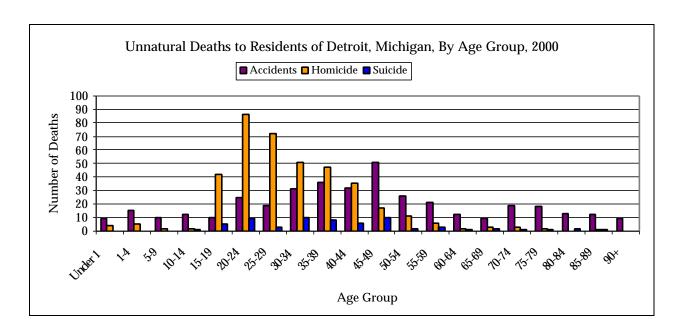


Figure 29

The Detroit Health Department Biostatistics Unit conducted a study of violent deaths among Detroiters, particularly focusing upon residents under 18 years of age, 18-35, and over 35. For all causes, including violent causes, there were 582 deaths among residents aged 18-35. Of the 582 deaths, 61% were due to suicide, homicide, and accidents. Firearms were involved in 41% of them. Homicide accounted for 247 of the deaths to residents in the age group, of which 219 (88.6%) involved the use of firearms. Most homicides for ages 18-35 were to male residents. Of the 247 homicides, 218 were males, and 29 were female. Ninety percent of the male homicides for ages 18-35 involved the use of firearms, while 79% of the female homicides involved firearms. <sup>66</sup>

# CRIME AND VICTIMIZATION

The Detroit Police Department participates in the national Uniform Crime Reporting (UCR). Program, operated by the Federal Bureau of Investigations (FBI). Violence indicators reported in the UCR include murder, rape, robbery, aggravated assault and the illegal possession or carrying of a weapon. According to 2000 UCR numbers, 41% of the Wayne County arrests for violent crime among youth aged 16 and younger are in Detroit. Also, in 2000, 71% of the state's juvenile arrests for homicide occurred in Detroit. It is not evident from these statistics, how many juvenile charges were substantiated and resulted in penal action.

The Youth Crime Gun Interdiction is a youth focused firearms enforcement program that is part of an overall firearms enforcement program managed by the ATF. Each year, the Bureau of Alcohol, Tobacco, and Firearms (ATF) releases *Crime Gun Trace Reports* that describe the characteristics of gun traces requested throughout the country from participating communities, including Detroit. The most recent report was for 1999.

In the *Gun Trace Reports*, ages 17 and under are categorized as "juveniles," and ages 18-24 are categorized as "youth." Of 1,266 gun traces for which the age of the gun possessor was known,

565 (45%) involved crimes associated with possessors aged 24 and under. Juveniles were associated with 6% of the recovered crime guns, while youth were associated with 39% of the recovered crime guns. Most of the crimes were attributed to "firearm offenses" which include any offense or crime in which a firearm was involved. Sixty four percent of the juvenile and 57.7% of the youth gun possessions were associated with firearm offenses. Narcotics crimes accounted for 23.1% of the juvenile and 21.8 % of the youth firearm possessions. Smaller proportions of the possessions were associated with other crimes.<sup>67</sup>

According to the U.S. Department of Justice, teens experience the highest rates of violent victimization. In a review of homicide, rape, robbery, simple and aggravated assault statistics from both the National Victimization Survey and the UCR, victimization rates are highest for age ranges 12-15, 16-19, and 20-24. Following a similar timeline to the one discussed in the *Surgeon General's Report*, victimization peaked among these ages in 1993. Though they have decreased significantly since 1993, victimization is still highest for 16-19 year olds, followed by 12-15 year olds, then 20-24 year olds. <sup>68</sup>

# **YOUTH ATTITUDES**

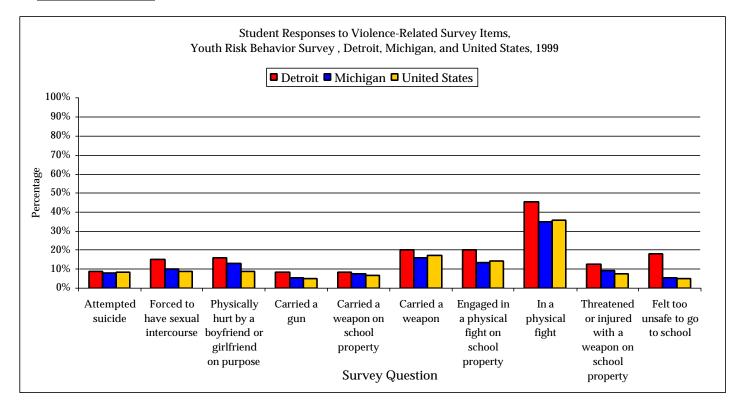


Figure 30

According to the Surgeon General's Report, a national decline in youth homicide since 1993 is considered to be related to less carrying of weapons and use in violent crimes among youth. Further, the *Report* states, "...if youth still involved in violence today begin carrying and using weapons as they did a decade ago, this country may see a resurgence of the lethal violence that characterized the violence epidemic." This statement has not been substantiated for the City of

Detroit and may not be true. National percentages of students who carried a gun, according to the YRBS have declined since 1993.

For Michigan and for Detroit however, there has been no significant change in the percentage of high school students who reported carrying a gun. Michigan and Detroit began to participate in the survey at later dates. In 1999, whereas 4.9% of the participating students in the United States reported carrying a gun and 5.6% for students throughout Michigan, 8.2% reported carrying a gun in Detroit. Student responses to violence related questions on the 1999 YRBS are presented in Figure 30.12,69

Healthy People 2010 has several objectives related to violence prevention including: reducing all homicides, increasing gun safety, reducing firearm-related injuries and deaths, maltreatment of children, partner assault, alcohol and illicit drug related violence and work related assaults. Healthy People 2010 also has an objective to reduce weapon carrying by adolescents.

# <u>CONCLUSION:</u> DISPARITY AND THE HEALTH STATUS OF DETROITERS

## Disparity and the Health Status of Detroiters

Various health concerns affect human life prior to birth and throughout the life course. The topics addressed in the *Profile* and a host of other issues have a tremendous amount of impact on the well being of Detroiters. They are issues that impact not only the health of individuals, but also the nature of living for families and the city around them.

Humans are, for the most part, biologically the same. Race, although a significant social construct, is little more than a biological difference in flesh tones. Variations in individuals that are related to genetics are not enough to account for significant gaps in health indicators between racial and ethnic groups.

Still, disease occurs more often, affecting more individuals from, and often with more severity, among certain racial and ethnic groups. As depicted by much of the data discussed in the *Profile*, this is particularly true for people of color. Many research findings highlight *disparity* with regard to health status indicators of various racial and ethnic groups. Disparity, with regard to health data, can be defined as a large difference between groups in new cases, cases over time, or deaths that are attributable to a specific health indicator.

Since Detroit has a clear majority, disparities between racial and ethnic groups are not as apparent in looking at health data for the city as they are when comparing Detroit data to state and national data. Health disparities between Detroit and the rest of the state are related to the "minority" majority in the city. As enumerated in the 2000 Census, Detroit's population is 81% Black. In contrast, 80% of the state population is White. Fifty-five percent of all Black Michiganders are Detroit residents. Hispanic residents, who also suffer a disproportionate burden of disease, represent 5% of the Detroit population and are 14% of the state's Hispanic population.

A web of factors creates and is created by the health status of Detroiters. Bearing this in mind, as we pursue our charges as an institution, it is critical to develop a cycle of investigation, education, and dialogue. A key question in that cycle is: How can we address the aspects of residents' lives that manifest, in aggregate, as disparities between their health and that of other communities. "Race" represents not a biological difference among populations but represents the historical, social, economic and political experience that a population may have in common. As well there are factors that may have been unobserved, which impact the health of various groups.

As an organization, the Detroit Health Department holds major stakes in the health of the community and our charge to promote and protect the health, safety, and quality of life of those who live in the City of Detroit. Our functions include assessing need, developing policy, and assuring access to optimal care that will serve our residents. As a part of these functions, the Department includes the elimination of health disparities for Detroit residents as a priority. The DHD *Community Health Profile* is one step toward crafting a more complete assessment of the health status and health needs of Detroiters to inform our provision of the most essential public health services to the city.

## *Glossary*

#### AGE ADJUSTMENT

Age adjustment, using the direct method, is the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. This adjustment is usually done when comparing two or more populations at one point in time or one population at two or more points in time.

### **BLACK**

A person having origins in any of the black racial groups of Africa.

#### **CAUSE OF DEATH**

All those diseases, morbid conditions or injuries, which either resulted in or contributed to death and the circumstances of the accident or violence, which produced death.

#### **DEATH RATE**

Number of deaths during a specified period divided by the number of persons at risk of dying during the same specific period x 1,000.

#### **HISPANIC**

A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

#### INCIDENCE RATE

A measure of the frequency with which an event, such as a new case of illness, occurs in a population over a period of time. The denominator is the population at risk; the numerator is the number of new cases occurring during a given time period.

#### INFANT MORTALITY RATE

The infant mortality rate is the number of deaths of children less than one year of age divided by the number of live births in the same year x 1,000.

#### LIVE BIRTH

A live birth is the complete expulsion or extraction from a pregnant woman, which, after such expulsion or extraction, shows any evidence of life.

#### **MORBIDITY**

Any departure, subjective or objective, from a state of physiological or psychological well-being.

#### **MORTALITY**

A measure of the frequency of occurrence of death in a defined population during a specified interval of time.

#### **POPULATION**

The total number of inhabitants of a given area or country. In sampling, the population may refer to the units from which the sample is drawn, not necessarily the total population of people.

#### **PREVALENCE**

The number or proportion of cases or events or conditions in a given population.

#### PREVALENCE RATE

The proportion of persons in a population who have a particular disease or attribute at a specified point in time or over a specified period of time.

#### **RATE**

An expression of the frequency with which an event occurs in a defined population.

#### RISK

The probability that an event will occur, e.g. that an individual will become ill or die within a stated period of time or age.

#### **SURVEILLANCE**

The systematic collection, analysis, interpretation, and dissemination of health data on an ongoing basis, to gain knowledge of the pattern of disease occurrence and potential in a community, in order to control and prevent disease in the community.

#### **TREND**

A long-term movement or change in frequency, usually upwards or downwards.

#### UNDERLYING CAUSE OF DEATH

The underlying cause of death is (a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.

#### WHITE

A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

**APPENDICES** 

Appendix I, Detroit Population By Age, Race/Ethnicity, and Gender, 2000

	Black Non-Hispanic			White Non-Hispanic			Hispanic			All Other			Total Population		
Age Group	NH	NH	Black NH Total	White NH Male		NH	Hispanic Male		Total	Other			Total Population Male	Total Female Population	Total Population
Under 1	6,034	5,728	11,762	509	432	941	669	655	1,324	415	358	773	7,627	7,173	14,800
1 to 4	25,525	24,883	50,408	1,842	1,755	3,597	2,182	2,233	4,415	1,539	1,473	3,012	31,088	30,344	61,432
5 to 9	40,744	39,621	80,365	2,511	2,333	4,844	2,569	2,377	4,946	1,896	1,831	3,727	47,720	46,162	93,882
10 to 14	36,285	35,418	71,703	2,380	2,166	4,546	2,021	1,954	3,975	1,589	1,548	3,137	42,275	41,086	83,361
15 to 17	17,917	17,950	35,867	1,352	1,154	2,506	1,260	1,010	2,270	804	787	1,591	21,333	20,901	42,234
18 and 19	10,666	10,670	21,336	1,173	1,080	2,253	1,174	762	1,936	502	446	948	13,515	12,958	26,473
20 to 24	23,974	27,259	51,233	3,285	3,092	6,377	3,261	2,163	5,424	1,320	1,300	2,620	31,840	33,814	65,654
25 to 29	26,293	32,608	58,901	3,810	3,385	7,195	2,986	2,287	5,273	1,477	1,377	2,854	34,566	39,657	74,223
30 to 34	24,851	31,389	56,240	3,935	3,169	7,104	2,416	1,838	4,254	1,333	1,169	2,502	32,535	37,565	70,100
35 to 39	24,026	30,648	54,674	4,198	3,128	7,326	1,898	1,476	3,374	1,146	1,027	2,173	31,268	36,279	67,547
40 to 44	25,449	31,407	56,856	4,490	3,504	7,994	1,402	1,096	2,498	906	894	1,800	32,247	36,901	69,148
45 to 49	22,604	28,709	51,313	4,388	3,517	7,905	1,100	941	2,041	809	887	1,696	28,901	34,054	62,955
50 to 54	19,071	23,766	42,837	3,856	3,442	7,298	772	714	1,486	637	758	1,395	24,336	28,680	53,016
55 to 59	13,455	16,870	30,325	2,810	2,825	5,635	567	501	1,068	473	544	1,017	17,305	20,740	38,045
60 to 64	9,783	13,407	23,190	2,177	2,255	4,432	411	436	847	402	473	875	12,773	16,571	29,344
65 to 69	8,841	12,797	21,638	1,877	2,177	4,054	326	372	698	291	373	664	11,335	15,719	27,054
70 to 74	8,142	11,782	19,924	2,095	2,653	4,748	286	319	605	211	321	532	10,734	15,075	25,809
75 to 79	6,392	9,620	16,012	1,921	2,813	4,734	175	204	379	182	253	435	8,670	12,890	21,560
80 to 84	3,498	6,082	9,580	1,341	2,280	3,621	85	102	187	100	165	265	5,024	8,629	13,653
Over 85	2,272	5,530	7,802	817	1,994	2,811	68	99	167	70	130	200	3,227	7,753	10,980
Total	355,822	416,144	771,966	50,767	49,154	99,921	25,628	21,539	47,167	16,102	16,114	32,216	448,319	502,951	951,270
Percent/ Population			81.2%	)		10.5%			5.0%			3.4%	47.1%	52.9%	100.0%

Table 1

## Appendix II

## Detroit-Specific Asthma Findings and Recommendations

Resources that can be helpful to community members seeking more information about asthma include the Michigan Department of Community Health, the National Institutes of Health's National Heart, Lung, and Blood Institute, and the Centers for Disease Control and Prevention. Through MDCH, Kenneth Wilcox, M.D., Dr. PH and Joann Hogan have shared some primary sources of asthma data that are relevant to Detroit.

Drs. Wilcox and Hogan cited that there were no readily available sources of data concerning the prevalence of asthmatic children or the incidence of asthmatic attacks. Analysis was conducted of hospital discharge and death certificate data to describe the occurrence of asthma in children in Michigan from 1989 to 1993. A summary of the findings from the analysis include:

- \*\* There were 35,697 children under 15 years of age discharged from Michigan hospitals with a principle diagnosis of asthma. The rate was 34 per 10,000 children. The rate for children under 5 was approximately 3 times that for children 5 to 14, and the boy's rate was 1.7 times higher than girls.
- \*\* The rate for Black children (81.3/10,000) was about three times higher than that for White children (25.6/10,000). The rates appear to be gradually increasing for Black children over this period but not for White children.
- \*\* The peak incidence of hospitalization for asthma was in September, with a smaller peak around March. This pattern was more pronounced in children 5 to 14. December, January, June and July were the lowest months.
- # The length of hospital stay averaged 2.7 days for the five-year period. The average has gradually declined over the period from 2.95 days to 2.55.
- \*\* Three groups of counties had rates above the overall state rate: four counties in the southeast (Wayne, Washtenaw, Lenawee, Jackson), four counties around Saginaw Bay (Bay, Saginaw, Genesee, Huron), and two counties in the southwest (Berrien, Cass). Although these included counties with urban areas, they also included rural areas, and some counties with urban areas did not have high rates.
- ₩ During the ten year period, 1985 to 1994, there were 62 deaths in children due to asthma for an annualized rate of 3 per million. The rates were much higher in Black children and those 10 to 14 years old. Sixty percent, or 37, of the deaths were in Wayne Co. children, which is disproportionately high considering their rates of hospitalization. Six counties had two deaths and 13 had one death each.
- \*\* Overall, Medicaid was the source of payment for 37% of childhood hospitalizations for asthma. The length of stay in the hospital was longer for children supported by Medicaid. In low incidence counties, Medicaid supported 34% of the hospitalizations. In the high incidence counties of the southwest and Saginaw Bay

areas, Medicaid supported 54% of the hospitalizations. In the high incidence southeast counties, Medicaid supported 35% of the hospitalizations, but 23% were from sources other than Medicaid or private insurance, including "free."<sup>70</sup>

A report summary regarding Detroit residents noted asthma hospitalization rates for Detroit that were historically high and were much the same in 1996. Especially critical for Detroit children is that their rates have continued to rise, in contrast to the rest of the state. To the extent that hospitalizations are a reflection of the asthma problem, the authors cite Detroit as Michigan's primary area of concern. More specific findings from the report summary include:

- \*\* For the state as a whole, the number of hospitalizations for asthma among children has been stable for those under 5 and between 10 and 14, but has increased for the 5 to 9 age group. The number of discharges of children has risen for Detroit but has declined for the rest of the state.
- \*\* In 1995 and 1996, the number of Black children hospitalized for asthma in the state exceeded the number of White children. The number of Black children hospitalized in Detroit has risen dramatically, whereas the number of Black children hospitalized in the rest of the state rose only slightly during this time.

The authors examined the numbers of hospitalizations in Detroit with a principle diagnosis of asthma and the number having a different principle diagnosis but having asthma included in the diagnoses coded. As expected, the rates for asthma as primary diagnosis were higher in males under 15 and in females 20 or older. Black persons at all ages had higher rates than White persons, and persons of other race had rates lower than White persons.

- \* Good data sources for understanding the community wide impact of asthma are hard to find. Many initiatives have been funded at various levels of government to address this problem.
- It was noted that there were 12 Detroit hospitals and 2 suburban hospitals that had more than 300 admissions for asthma in 1996. The report suggests that a limited number of hospitals working together could develop compatible protocols and programs if consistency in dealing with asthma is felt desirable.

The greatest numbers of asthma admissions were in the northeast and northwest parts of Detroit. For the most part, the highest rates were in central and southern Detroit. The major exception was ZIP code 48235 where the rate for school aged children was highest. Close examination of the geographic distribution of cases will be necessary to direct programs to the areas most needed.<sup>71</sup>

Wilcox and Hogan recommend the following for better understanding asthma among children:

\* that review of deaths in children under 15 due to asthma be instituted in order to inform the development of interventions to prevent serious complications of asthma, and particularly death,

- \* a trial of preschool "roundups" of children with asthma for educational activities that include material on the standard guidelines for dealing with asthma attacks at home and at school modified as necessary by consultation with local physicians as to the methods they prescribe,
- \* a record review of a sample of hospital admissions for asthma in high incidence areas is instituted to determine what type of interventions would be most important for the population of asthmatic children in the community during different periods of the year (the assistance of physicians experienced in the diagnosis and treatment of childhood asthma should be involved in these reviews).
- \* and that analysis continue to better pinpoint the areas of high incidence of hospitalization and their characteristics.<sup>66</sup>

#### Appendix III

## Syphilis Elimination

A national plan to eliminate syphilis was introduced by Surgeon General David Satcher in October 1999 and implemented by the Centers of Disease Control and Prevention thereafter. Syphilis has a repeatedly observed seven-to-ten year cycle. Based on this trend, there is a limited time frame to actually eliminate the disease when the cases are on a decline. The Syphilis Elimination Plan is an approach to eliminate the further spread of the disease involving five intervention strategies developed by the Centers for Disease Control and Prevention. Figure 31 shows the trend in reported primary and secondary (P & S) syphilis cases for Detroit, Michigan, and the United States from 1990 to 2000. Michigan and United States rates were lower than Detroit rates throughout the 1990s and have continued to decline.

During the 1990s, P & S syphilis rates peaked in 1991 at 93.7 cases per 100,000 Detroiters. From 1991 to 1998, however, there were dramatic declines in reported syphilis cases for the city. Enhanced syphilis testing, treatment, and outreach may explain increased reported cases in the late 1990s to 2000. When screening efforts are increased, it is natural to experience an increase in identified cases prior to decreases resulting from an intervention.

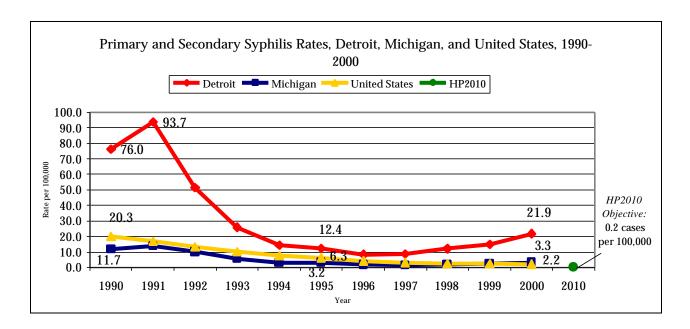


Figure 31

The *national goal* of the Syphilis Elimination Plan is to reduce the number of syphilis cases to 1,000 or fewer and to increase the number of syphilis-free counties to 90% by the year 2005. At the *national level*, syphilis elimination is defined as the absence of sustained transmission in the United States. At the *local level*, syphilis elimination is defined as the absence of transmission of new cases within the jurisdiction except within 90 days of report of an imported index case.

The elimination of syphilis will have direct implications on two critical public health concerns:
1) further reduction in the spread of HIV and other STDs such as gonorrhea and chlamydia; and
2) a reduction in the number of spontaneous abortions, stillbirths, and multi-system disorders caused by congenital syphilis acquired from infected mothers.

At the local level cross-cutting strategies included in the CDC's Syphilis Elimination Plan call for *enhanced surveillance* and *strengthened community involvement*. Intervention strategies include rapid outbreak response, expanded clinical and laboratory services, and enhanced health promotion.

Due to the continued increased rates of syphilis, the City of Detroit was identified by the CDC as one of nine High Morbidity Areas (HMA) and a primary participant in the CDC's Syphilis Elimination Plan. Of Michigan's 990 cases of syphilis (all stages) in 2000, 761 were Detroit cases. For primary and secondary syphilis, which are considered to be better indicators of new cases 274 of Michigan's 330 cases were reported by Detroit. Consistent with the national plan to eliminate syphilis is the *HP2010* objective of 0.2 cases per 100,000 population.

## City of Detroit Health Department Community Health Profile, 2000 User Survey

We would like your input in identifying ways to improve the *Community Health Profile* in future editions. Please take a few moments to complete the following survey.

<b>USER INFORMATION 1.</b> (Please check all that apply to you) <b>I</b>	am a/an:					
resident of the City of Detroit employee of the City of Detroit public health staff member hospital staff member academic staff member student	elected official human service journalist community org	es worker ganizer				)
2. (Please check all that apply to you) I	am affiliated with:					
<ul> <li>a non-profit organization</li> <li>a neighborhood organization</li> <li>a school (K-12)</li> <li>a college or university</li> <li>a local public health department</li> </ul>	a state health a health care p media (please other (please	orovider specify n	nediui			)
USE OF THE COMMUNITY HEAL	TH PROFILE					
3. Would you rather receive future	editions of the <i>Prot</i>	file: OR			copy, n the Ir	nternet
For the following questions, indicate ("Not Useful"(1)) to highest ("Very Uapplicable.	· ·					ı lowest
4. Overall Usefulness	Not Use	eful				Very Useful
	1	2		3	4	5
DHD Community Health Profile			] Γ			

5. Contents in <i>Profile</i> Sections	Did Not Use	Not Useful				Very Useful
	N/A	1	2	3	4	5
How to Use the Profile						
Introduction: The City of Detroit						
Infant Mortality						
Childhood Immunization						
Adolescent Childbearing						
Childhood Asthma						
Childhood Lead Poisoning						
Tuberculosis						
HIV						
Sexually Transmitted Diseases						
Cancer						
Cardiovascular Disease						
Diabetes						
Substance Abuse						
Youth Violence					Щ	Щ
Conclusion: Disparity/Health						
Glossary						
Appendices	$\Box$				$\sqcup$	
Charts in the <i>Profile</i>						
6. Please make additional commer	nts or sugge	estions for futu	re edit	tions in	this sp	ace:

Return to: Kenyetta Jackson

Detroit Health Department

Office of Health Policy, Planning and Grants Management

1151 Taylor, Room 255Č Detroit , MI 48202

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